Linguistic Consulting Service

Judy A. Shepard-Kegl, Ph.D.

JUDY A. SHEPARD-KEGL, PH.D., Certified Interpreter
52 WHITNEY FARMS ROAD
NORTH YARMOUTH, ME 04097

(207) 847-3074 (VP/VOICE)
(207) 780-4940 (FAX)
judykegl@gmail.com

Report:

1. **Priscilla Canamer Saunders** (Date of Testing: July 11, 2014 age at time of testing: 32) Date of Birth: December 28, 1981)

2. **Jason Harry Branden** (Date of Testing: July 11, 2014 age at time of testing: 38) Date of Birth: December 3, 1975)

Communication Assessment for: Heather Gilbert, Esq. and Rob Roe, Esq.

Date of Submission of Report: August 4, 2014

Evaluator: Dr. Judy Shepard-Kegl, Ph.D., NIC-M, SC:L, CI/CT, CSC, OTC, ED:K-12, NAD-IV

From the National Registry of Interpreters for the Deaf:
Comprehensive Skills Certificate (CSC)
Certificate of Interpretation (CI)
Certificate of Transliteration (CT)
National Interpreter Certification (NIC-Master)
Oral Transliteration Certificate (OTC)
Specialist Certificate: Legal (SC:L)
NAD-IV (recognition of National Association of the Deaf Certification-Level IV)
Educational Certification: K-12 (recognition of EIPA Certification)
Educational Interpreter Performance Assessment (EIPA)-six certifications:
ASL (elementary and secondary)
PSE (elementary and secondary)
MCE (elementary and secondary)

Education:
B.A. in Anthropology (Brown University)
M.A. in Linguistics (Brown University, Thesis: *Some Observations on Bilingualism: Look at Data from Slovene-English Bilinguals*
Ph.D. in Linguistics (M.I.T., Dissertation: *Locative Relations in American Sign Language Word Formation, Syntax and Discourse*
Postdoctoral studies: Center for Molecular and Behavioral Neuroscience, Rutgers, The State University of New Jersey)
Master Mentor Certificate, Project T.I.E.M., Northeastern University
Legal Interpreter Certificate Program, Front Range Community College
License (Culturesmart, Inc.; to teach *The Essential Piece* curriculum in medical interpreting)

List of items considered in making this assessment:

Narrative Elicitation Materials:

Mr. Koumal Flies Like a Bird (1.5 minute non-verbal cartoon)

signed
written
spoken

Mr. Koumal Battles his Conscience (1.5 minute non-verbal cartoon)

signed
written
spoken

Background conversation
Cultural profile
Reading passages

fifth grade (*Adolescence*)
twelfth grade (*Stages of Written Language Development*)

Flynt-Cooter Reading Inventory (Form A)
San Diego Screening
Lipreading Task
Vocabulary Task
ASL Production Task: *Bowerman, Topological Relations Task*
Movie Tasks:

1. *Moonstruck* (Priscilla Saunders and Jason Branden)
2. *The Natural* (Jason Branden)
3. *Overboard* (Jason Branden)
4. *The Notebook* (Priscilla Saunders)
5. *Titanic* (Priscilla Saunders)

Legal documents: See attached form from the attorneys "Documents Provided to Dr. Shepard-Kegl (Expert Witness). I worked primarily from the complaint.

Objective: The objective of this evaluation is to assess Priscilla Saunders' and Jason Branden's need for an ASL proficient interpreter able to convey medical information in ASL using the grammatical devices most appropriate for that purpose in the context of medical appointments related to Ms. Saunder's pregnancy leading up to the birth of their second child. I will address several issues: 1. Ms. Saunders' and Mr. Branden's use of interpreters; 2. their primary and preferred mode of communication; and 3. Their capacities with respect to the use American Sign Language and of alternate

communication modes such as speech, lipreading, reading, and writing in English. The following specific questions have been posed to me:

1. What is Ms. Saunders' level of proficiency in ASL?
2. What would Ms. Saunders' understanding of fingerspelled medical terms be as opposed to receiving the information regarding the meaning of those terms in ASL?
3. What is Ms. Saunders' understanding of PSE or English-like sign language?
4. Is the pace of Ms. Saunders' and Mr. Branden's signing of a standard speech that proficient ASL interpreters would understand?
5. What are Mr. Branden's lipreading skills?
6. Could complications arise during labor and delivery because of the communication problems between the interpreter and Ms. Saunders?
7. Can NAD III certified interpreters be assumed to be qualified to interpret in medical situations, in particular neurology appointments, pre-natal appointments and high risk birth and delivery?
8. Can any interpreter be considered qualified to interpret for all Deaf individuals? And, more specifically can any NAD III certified interpreter be considered qualified to interpret for all Deaf individuals in all situations?
9. What is the standard practice in Minnesota regarding interpreters hired to work in hospital settings?
10. The interpreters in question took and failed the NIC test in 2012. Is this demonstrative that the interpreters were not minimally competent to serve as high level medical interpreters?

I will address these questions at the end of my report.

Background. Since I am not a factual witness in this case, I am taking the background information for this case straight from the factual allegations as provided to me by the plaintiffs' lawyers. They are included here only for my own background on the case.

Ms. Saunders and Mr. Branden are both profoundly deaf and use American Sign Language as their first and primary language.

Ms. Saunders first encountered the interpreting services of Eileen Bruns and Linda Rasmusson at her initial Mayo appointments. She noticed they were not able to understand her sign language and she could not understand them. She contacted the Mayo Language Department to request that they send Kathy Dorsett, the only Mayo staff interpreter Ms. Saunders could consistently understand, to all of Ms. Saunders's appointments or, alternatively, send a qualified freelance interpreter to her appointments. Ms. Saunders had frequent appointments and surgeries at Mayo for neurological and gynecological care. Mayo Language Department honored Ms. Saunders' need for a qualified interpreter by sending either Ms. Dorsett or a qualified contract interpreter until November 2010.

In April 2010, Ms. Saunders transferred her prenatal medical care from her local clinic to Mayo. Ms. Saunders' physicians suggested that she transfer her prenatal care to Mayo because of her seizure disorder and desired birth plan for her second child. Because she delivered her first child via caesarean section, Mayo Clinic was the only regional hospital known to Ms. Saunders with physicians willing to deliver Ms. Saunders' and Mr. Branden's second child by Vaginal Birth After Caesarean (VBAC). For these reasons, she and Mr. Branden began driving from Faribault, MN to Mayo for prenatal appointments when Ms. Saunders was 6-weeks pregnant.

For her first prenatal appointment, Ms. Saunders, aware that Ms. Dorsett was no longer a staff interpreter, called the Mayo Language Department and specifically asked that they do not send either Eileen Bruns or Linda Rasmusson. She reiterated that those two staff interpreters could not interpret accurately for her sign language and they did not explain concepts clearly in an understandable language. The Language Department accommodated Ms. Saunders' request by sending freelance interpreters for all of Ms. Saunders' prenatal appointments until November 2010, a total of 7 months.

The Mayo Language Department, including Jane Hughes and David Voller, began to reject Ms. Saunders' and Mr. Branden's need for a qualified interpreter beginning November 2010 through January 4, 2011, the last 8 weeks of Ms. Saunders' pregnancy. The Language Department abruptly decided to stop hiring free lance interpreters for Ms. Saunders' appointments and chose to send only Linda Rasmusson despite Ms. Saunders repeated complaints of Ms. Rasmusson's errors and omissions.

In November 2010, no one from the Mayo Language Department or Mayo healthcare providers informed either Mr. Branden or Ms. Saunders that Mayo would begin assigning Ms. Rasmusson to interpret for Ms. Saunders' appointments. Once they arrived for a scheduled appointment and learned that Ms. Rasmusson was their interpreter, Mr. Branden and Ms. Saunders felt they had no reasonable choice but to proceed with the appointment. While Ms. Saunders was signing, Mr. Branden, who has some ability to read lips, observed Ms. Rasmusson misinterpret several of Ms. Saunders' statements. Mr. Branden repeatedly interrupted Ms. Rasmusson to correct her. Ms. Rasmusson repeatedly interrupted Ms. Saunders in mid-sentence to ask for an explanation of signs or to repeat signs. Ms. Saunders lost track of her thoughts and the message she was attempting to convey due to the frequent interruptions. At some points, when Ms. Rasmusson did not understand Ms. Saunders' or Mr. Branden's sign language, Mr. Branden observed that Ms. Rasmusson would choose to omit the information they were signing. Mr. Branden had to provide additions and corrections to Ms. Rasmusson's interpretation for both the physician and Ms. Saunders when Ms. Rasmusson was not clear or incorrect in her interpretation.

After the first November appointment where Ms. Rasmusson appeared, Ms. Saunders called Jane Hughes through Video Relay Service to report the deficiencies of Ms. Rasmusson's interpreting and to reiterate her need for a qualified interpreter for all future appointments. Ms. Hughes, director of the Mayo Language Department, stated Mayo would no longer hire interpreters other than Mayo staff interpreters. Two weeks later, Mayo sent Ms. Rasmusson to Ms. Saunders' 38-week checkup. At the end of that

appointment, Mr. Branden and Ms. Saunders walked down to the Language Department to make another complaint about Ms. Rasmusson's interpreting. Ms. Hughes repeated that she would not hire a different interpreter. She asked that they meet with Ms. Rasmusson and Ms. Bruns to teach them how to improve their interpreting skills. Mr. Branden and Ms. Saunders, as Mayo patients, did not find it reasonable to teach the interpreters how to do their job. Ms. Saunders and Mr. Branden provided Ms. Hughes with a detailed explanation of Ms. Rasmusson's errors and inaccuracies. They asked that Ms. Hughes to send a qualified interpreter for Ms. Saunders' 39-week appointment. Mayo again sent Ms. Rasmusson to interpret for Mr. Branden and Ms. Saunders for the next appointment in late November 2011. The same interpretation errors and deficiencies occurred at that appointment.

Ms. Rasmusson interpreted again on December 7th for the couple. Ms. Saunders attempted to make an appointment at the end of exam with the receptionist to specifically request a freelance interpreter with higher certification skills. The receptionist denied the request. On December 16th, 2011 Ms. Saunders emailed David Voller, who was Jane Hughes' boss, and expressed her frustration with the inaccurate and ineffective interpreting services she had received from Ms. Rasmusson. She expressed that she did not want to meet to discuss the matter—she simply needed a qualified interpreter for her appointments. Mr. Voller replied to Ms. Saunders' email with another invitation to meet to discuss the matter. He was not willing to arrange for a qualified interpreter for Ms. Saunders' subsequent appointments. Ms. Saunders chose not to respond to his email and did not consent to a meeting.

At Ms. Saunders' 40-week prenatal exam, Ms. Rasmusson interpreted again. Based on the information conveyed through Ms. Rasmussen's interpretation, Ms. Saunders and Mr. Branden were led to believe that if Ms. Saunders did not go into labor naturally within the week, the physician would induce Ms. Saunders at her 41-week exam in January.

By January 4th, 2011, Ms. Saunders had not yet delivered and was now one week overdue. She and Mr. Branden packed their bags, arranged for childcare for their oldest child, and appeared at Mayo prepared to be admitted and induced for labor. Ms. Saunders also brought her sister for moral support at the delivery. They anticipated, based on what they had been told, that they would be admitted after their prenatal exam. When Ms. Saunders and Mr. Branden entered the room, they were surprised to find David Voller, Jane Hughes and Ms. Rasmusson present in Ms. Saunders' examination room. The prenatal appointment would include, among other things, a vaginal examination. Ms. Saunders did not consent to meeting with staff from the Language Department and most certainly did not want to meet with them in her examination room right before delivering her child. Mr. Voller did not notify Ms. Saunders that he would be present at her January 4th exam. He was aware that Ms. Saunders did not want to meet with either of them. Nevertheless, he forced his meeting with Ms. Saunders during her 41-week prenatal appointment.

Ms. Saunders demanded that all three of the staff, including Ms. Rasmusson leave her exam room immediately. Mr. Voller and Ms. Hughes refused to leave. Ms. Saunders left the room and waited with her sister in an adjacent room until Mr. Voller and Ms. Hughes left. Insistent upon discussing the communication problems in the presence of Ms. Rasmusson, Mr. Voller began asking Mr. Branden questions about the interpreting errors. Mr. Branden repeated with detail and by example the problems and errors Ms. Rasmusson produced when she interpreted. Mr. Voller told Mr. Branden that Ms. Saunders needed to sign slower and at an elementary level so that Ms. Rasmusson could understand her language. Mr. Branden stated that Ms. Saunders signs at a normal pace and speed. He expressed that a patient should not have to adapt her language or water down her complex thoughts and ideas because of the deficiencies of an unqualified interpreter. Mr. Branden informed Mr. Voller that neither Ms. Rasmusson nor Eileen Bruns hold a certification that is acceptable for medical interpreting, and that Mayo should hire and provide interpreters with the minimum standard certification level for medical interpreting.

Eventually, Mr. Voller and Ms. Hughes left the room but Ms. Rasmusson refused to leave. Ms. Saunders was distraught by Mr. Voller's intrusion. She felt great anxiety, frustration and confusion. When Ms. Saunders was called back to her exam room, she told Ms. Rasmusson and the physician that she did not want Ms. Rasmusson present during her exam. She would prefer to write with the physician for communication. The physician required that Ms. Rasmuson remain as the interpreter stating that, "I have the right to an interpreter, too." Ms. Saunders asked about being admitted and how they would proceed with inducing labor. The physician stated that there must have been a misunderstanding because they would not induce for labor until Ms. Saunders was 42-weeks pregnant. Ms. Saunders and Mr. Branden stressed to the physician their disappointment with Ms. Rasmusson's poor quality if interpreting because they were led to believe, based on the appointment from the previous week, that they would be induced on January 4th, 2011. Ms. Saunders stated that because of her concern for communication errors and Mayo's refusal to provide a qualified interpreter, she was not comfortable proceeding with a natural delivery. She feared the risk of miscommunication and danger to the child in the event that she could not understand the communication or that the staff would misunderstand her.

Ms. Saunders and Mr. Branden, out of fear that they would not be able to communicate their thoughts, concerns and questions during Ms. Saunders's high-risk labor and delivery, and out of fear that Mr. Voller or Ms. Hughes would again appear in Ms. Saunders's delivery room, decided to transfer to a different hospital two days before their delivery.

In July 2011, Ms. Saunders was again referred by her primary care physician in Faribault to see her neurologist at Mayo for an evaluation of her seizure disorder. Aware of the Language Department's policy to only send its unqualified interpreters to her appointment, Ms. Saunders contacted Dr. Greogry Cascino's receptionist to request that they do not send either staff interpreter. If they would not send an interpreter with appropriate qualifications, then she would write with the neurologist. When Ms. Saunders arrived for her appointment, she was shocked to see that Ms. Rasmusson appeared again. Ms. Saunders wrote a note to the nurse informing her that she did not want Ms. Rasmusson to interpret and that she prefers to write with the nurse and Dr. Cascino for communication access. Despite Ms. Saunders request for Ms. Rasmusson to leave, she continued interpreting. Ms. Saunders informed the nurse that if Ms. Rasmusson would not leave, she would cancel the appointment. Ms. Rasmusson, appearing offended, stormed out of the clinic. Ms. Saunders entered the exam room and continued to write with the nurse and Dr. Cascino. Because Mayo was unwilling to provide a qualified interpreter, Ms. Saunders and Dr. Cascino were limited to writing for the entire duration of her neurological examination.

Methodology: Elicitation, text analysis (linguistic analysis, coding)

I have been retained in this case to offer my expert opinion on the communication abilities and needs of the plaintiffs, Priscilla Saunders and Jason Branden as well as information regarding interpreting credentials, all of which I hold as a nationally certified interpreter. I have been asked about best practices regarding medical interpreting and interpreter credentialing. I will offer my opinion as a linguist, a nationally certified interpreter specialized in medical interpreting over the last 30 years, and as an interpreter trainer familiar with credentialing.

Every day, when I walk into an interpreting assignment I am making judgments about the language background and language needs of the consumers that I work with. I do this through interacting and conversing with them. This is an informal means of eliciting the data I need to make my decisions. What I am doing in this report is similar, but on a larger scale. I am gathering the information I need regarding Ms. Saunders and Mr. Brandon that will allow me to offer an expert opinion on their background and communication in the context of my expertise in linguistics, interpreting, ASL, and Deaf culture.

The standard methodology used in my profession is elicitation and linguistic analysis. The process is very much like the experimental method. A hypothesis is posed and data are elicited to help me to confirm or disconfirm the hypothesis. Standardized testing will not give me the individualized data that I need to inform my opinion. Deaf people are far too diverse and their language backgrounds are very heterogeneous. I need to look at each client in an individualized way, a single case study. The need for individualized assessment is noted by almost every researcher in the field of deafness, especially regarding reading abilities, but some of these opinions are addressed quite well in the following text.

> Mounty, Judith and Martin, David S. (eds.) 2005. *Assessing Deaf Adults: Critical Issues in Testing and Evaluation.* Washington, D.C.: Gallaudet University Press.

That is not to say that I do not at times make use of standard materials that have been developed to assess reading, interpreting proficiency, or ASL proficiency. I just do not apply them in a one-size fits all fashion. I have relied here upon pre-vetted grade-level vocabulary lists from research on basal readers, from informal assessments such as the *Flynt Cooter Reading Inventory* and the *San Diego Reading Screening*. In the beginning of this report I will provide some general background on Interpreting and ASL followed by a discussion of the various strategies I have used to elicit the data I needed to form my opinion in this case.

General Background on Interpreting

When is an interpreter needed? Deaf individuals are likely to request an interpreter--especially in a crucial situation where they are anxious to be sure that they are able to share and have addressed all their concerns. In the case where deaf consumers do request clarification on points missed (when they can determine this), a tension can arise between the service provider and deaf individual as a result of added time, effort and frustration in the communication context. This is a situation most deaf consumers are all too familiar with. It adds to the stress of the situation because the deaf clients fear that their treatment will be compromised as the result of a negative rapport with the service provider.

In contrast with most service providers, deaf people have a lifetime of negative consequences that have taught them to recognize their own limitations in communicative situations such as these. While the presence of an interpreter complicates the situation by adding another person and impinges upon a deaf person's privacy, the tradeoff is never being sure that they have gotten the message straight. So, while deaf people are equally reticent to call in an interpreter, they have learned from experience those situations in which such an accommodation is unavoidable.

The role of an interpreter. There exists in the United States the National Registry of Interpreters for the Deaf (RID, Inc., 333 Commerce Street, Alexandria, VA 22314; www.rid.org). This body is responsible for the evaluation, certification, and professional maintenance of interpreters nation-wide.

At the time of the events in this case, certified professionals available in Minnesota would have been certified by the National Registry of Interpreters for the Deaf (discussed above) and possibly also the National Association of the Deaf.

Passing the RID certification generalist test (CI and CT; CSC) or the new RID/NAD National Interpreter Certification (NIC) test assures the minimum

standard skills in American Sign Language and English to adequately interpret. The NIC was recently introduced and the CI and CT tests, as well as the previous CSC (Comprehensive Skills Certification), are no longer offered. The NAD test is also no longer administered. All prior certifications are still recognized.

When first introduced, the NIC had three levels of achievement: NIC, NIC-Advanced, and NIC-Master. The NIC was considered the minimal level of skill needed to interpret. NIC-Advanced (like the old CSC) recognized a higher level of achievement on the same test. NIC Master, which I was awarded, did not recognize a level of achievement higher than that recognized by NIC-Advanced, rather it recognized a higher level of achievement both in interpreting skill and in ethical reasoning. While the test was psychometrically valid, there was a lot of concern among the membership that a test developed to assess the minimal level of skill needed to interpret should also be used to document higher levels of skill. In response to much argument, on December 1, 2011 the three levels of attainment on the NIC test were discontinued and a revised single-level version of the NIC was introduced that remains a test of minimal skill to interpret in the field.

At the National Convention of the Registry of Interpreter for the Deaf in Atlanta, Georgia in 2011, the RID gave the reasons for making the NIC a single-level test and intentions in the future to develop completely independently a second level test (NIC II) that would test interpreters at a higher level which would qualify them to seek specialist certifications in areas such as legal and medical. This second level of testing has not yet been implemented, nor has the means by which future specialist certifications will be handled, e.g. via testing, portfolio submission, etc.

A few forms of credentialing, other than RID Certification, are also recognized by the Registry of Interpreters for the Deaf. The two most prevalent are the National

Association for the Deaf Certification (NAD III-V) and the Educational Interpreter Performance Assessment (EIPA) with a score of 4 or above out of a possible 5.

NAD Certification. The NAD Certification test is no longer given, but it is still recognized as certification and RID maintains NAD certification for interpreters who continue to acquire the required number of approved Continuing Education Units (CEUs) every four years. The NAD test has five assessment levels: Level I (Novice I), Level II (Novice II), Level III (Generalist), Level IV (Advanced), and Level V (Master). The three certified levels are described as follows:

- **Level III** (Generalist) The individual who attains this level possesses above average voice-to-sign skills, and good sign-to-voice skills, and demonstrates the interpreting skill necessary for some situations.
- **Level IV** (Advanced): The individual who attains this level possesses excellent voice-to-sign skills and above average sign-to-voice skills, and demonstrates the interpreting skill necessary for most situations.
- **Level V** (Master): The individual who attains this level possesses superior voice-to-sign skills and excellent sign-to-voice skills, and demonstrates the interpreting skill necessary for just about all situations.

NAD certification cannot really be compared with the RID certification. It came about at a time when RID was offering separate certification for Interpretation (CI, working into ASL as a target language) and Transliteration (CT, working into Conceptually Accurate Signed English as a target language). Being certified as a CI or CT reflects completely disparate skills. Transliteration may not be appropriate for many ASL signers, just as ASL Interpretation may not be suitable for signers more familiar with heavily English-influenced or English-based forms of signing. NAD felt that while an interpreter may favor one or the other, they should have the ability to serve both types of signers. A characterization of the skill levels of NAD tested interpreters appears below:

Level 1: POOR/MARGINAL PERFORMANCE
This person demonstrates very little skill on a given task; scattered phrases or

concepts may be completed correctly but the person has trouble conveying smoothly all that is voiced or signed. Misses more than is acceptable, pauses too often; demonstrates jerkiness and lags too far behind. May fingerspell too much, use conceptually incorrect signs, or demonstrates distracting mannerisms. Not at all ready to interpret.

Level 2: BELOW AVERAGE PERFORMANCE
This person may demonstrate ability to facilitate communication on a basic level but unable to complete task according to generally accepted interpreting standards; may do well in some parts, then do poorly
in other areas. Exhibits weakness, i.e.: too much deletion, too much fingerspelling; use of conceptually incorrect signs. May demonstrate reasonably good ability in voice to sign interpreting in straight English interpreting situations but fare poorly in sign to voice situations where reliance on ASL may be necessary. Might be of some assistance in a simple one-on-one situation where only manually coded English would be required.

Level 3: AVERAGE PERFORMANCE
This person demonstrates good interpreting abilities; skill shown is acceptable in meeting generally accepted interpreter standards. Occasional words, or phrases may be deleted in order to keep up with speaker or signer, but the expressed concept is accurate. Performance is generally accurate and consistently so; and someone you would feel reasonably comfortable in most interpreting situations.

Level 4: ABOVE AVERAGE PERFORMANCE
This person demonstrates above average skill in any given area. Performance is consistent and accurate. Fluency is smooth, with very little deletion, and the viewer has no questions as to the candidate's competency. Should be able to interpret and interpret well in any situation.

Level 5: SUPERIOR PERFORMANCE (IF NOT A NATIVE USER, THEN COULD ALMOST PASS FOR ONE) This person demonstrates excellent to outstanding ability in any given area. Performance is practically without flaw and this is the person you would go out of your way to seek to interpret for you.

While all three upper NAD certifications are recognized, in actual practice (job descriptions, various qualifications, etc. NAD IV and NAD V are recognized as being in the same ballpark as having both a CI and CT or having the NIC. A person with only NAD III is characterized as demonstrating "the interpreting skill necessary for some situations." *Some* is the relevant word here. NAD III interpreters would not be

considered ready for specialized interpreting venues requiring advanced level skills such as legal and medical, or even for many community jobs. The level III certification exists because NAD, representing Deaf consumers, felt that one thing lacking was a certification that recognized beginning level interpreters identified by members of the Deaf community able to handle some assignments vetted as appropriate by Deaf consumers. NAD III fills that void, but is not intended as approval of these interpreters for all situations.

The Educational Interpreting Performance Assessment (EIPA). The EIPA was developed as a means of assessing educational interpreters working in K-12 settings. There are five levels of skills. Like the NAD test, the first two levels are not really considered interpreter ready. There are some states that accept a 3.0 for working educational interpreters, but most states require a 3.5 or above. A study was done by EIPA to see what level on the EIPA was achieved by certified interpreters and they found that a level 4 or above was typically achieved by RID certified interpreters taking the EIPA test. Of course, this also depends upon familiarity with working in K-12 settings. The RID recognized passing the EIPA written test plus scoring at a 4 or above on the performance test of the EIPA to satisfy the certification requirement for educational interpreting in K-12 settings. They award the ED:K-12 certification to interpreters who can document these achievements on the EIPA. Educational interpreting is a specialized domain of interpreting, so every certified interpreter would not necessarily have the background and skills necessary to work in K-12 settings; nor would all interpreters with an ED:K-12 certification be qualified to work in community settings. In addition, the EIPA assesses an interpreter's ability to work with school age children, still in the process of academic development and language acquisition. The RID tests have never covered children.

Like educational interpreting, Legal and Medical Interpreting require specialized experience and knowledge. RID offers a certification in legal

interpreting, the *Specialist Certificate: Legal*. Some states like Maine, have laws that require interpreters to have an SC:L to interpret in legal and quasi-legal situations. Other states like New York have no certification requirement whatsoever. Nonetheless, interpreting in the legal domain requires specialized training and skill. Medical interpreting does not have a specialized certification from RID. There is a written test through the International Medical Interpreters Association (IMIA). While IMIA has a commitment to developing a performance assessment for each language, they have only developed tests for a handful of languages thus far and are exploring ways to certify the other languages, either through tests or a portfolio system demonstrating competencies.

> Under federal law applying to signed language interpreters, a "qualified interpreter" must be effective, accurate, and impartial."

While a qualified interpreter, under the law, need not be certified, the one reliable way to assure quality is to rely upon certified interpreters, who have a specific level of skills and are bound ethically not to accept work for which they are not qualified.

No two Deaf individuals sign alike. As with English speakers, there exist a variety of idiolects, ranging from dialects of formal ASL to an infinitely varying continuum of contact signing forms of English-influenced forms of ASL or ASL-influenced forms of spoken or written English. Because 90% of deaf individuals come from hearing, English speaking families, their exposure to both English and ASL can vary greatly, yielding the potential for many cases where deaf individuals command only a partially fossilized form of the target languages in question. They may be native speakers of neither, and interpreters are experienced in finding the communication mode best suited to their production and comprehension skills. Hearing clients also have greater and lesser degrees of familiarity in interacting with Deaf interlocutors. Interpreters are skilled at

facilitating these interactions and assuring that communication is indeed happening.

Interpreters are also bound by a strict code of conduct that assures their professional behavior (demeanor, confidentiality, self-evaluation of ability to perform the interpreting task, etc.) in all interpreting situations. One important characteristic of a certified interpreter is the ability to determine when and if their skills are not up to the task and the professionalism to withdraw from the interpreting situation and calling in an individual or interpreter team with the appropriate background and skills. For example, if a deaf person's ASL is nonstandard (e.g., a dialect of ASL unfamiliar to a given interpreter, highly influenced by a foreign sign language, minimal language skills in ASL, etc.) or if the range of registers in the repertoire of the interpreter are not sufficient to maximize transmission of information to a particular client.

Both the language and professional ethics training are essential to meeting the communication needs of an individual in a medical situation. Bringing in "a signer" (someone who knows some ASL, even a friend of the deaf individual) is not appropriate in these situations. A social acquaintance with conversational skills cannot necessarily facilitate communication within or outside of the social context. Anyone who speaks a second language can identify with "faking it" or maintaining a conversation with a speaker of that language despite major gaps in understanding. To backtrack every time part of the message is missed would quickly lead to a complete breakdown in any interchange. Interpreters must have the skills to understand and convey most of the message and the diligence to interrupt the proceedings and inform the consumers if failure of transmission or comprehension occurs.

An interpreter's role is to facilitate the communication between two parties who do not share a language in common. The use of different languages can often be

associated with distinct cultural experience bases. Therefore, an interpreter must also frequently perform cultural adjustments that allow the communication between the two parties to be transmitted and understood with the full content and nuance intended.

Facilitation of communication. American Sign Language and English are two completely distinct languages that are mutually unintelligible. They differ in how they mark subjects and objects, in how they ask questions, make relative clauses, order information in the sentence, mark gender on pronouns, omit versus require pronouns in subject position, use prepositions, mark verbal aspect (duration, iteration, etc.), tense (present, past, future), as well as adverbials (carefully, recently, etc.). They are as different from one another as English is from Russian, for example. An interpreter needs to take the input from one language, understand it, and, concept for concept, convey that information in the grammatical forms of another language. Consider some interesting points of confusion for a hearing interlocutor observing ASL. The examples given in this section are characteristic of ASL and not taken from these clients in particular. The remaining examples throughout the report are from the clients directly.

Supposed a Deaf signer voiced concurrently with signing the following compound sign GOOD^ENOUGH in ASL. The hearing interlocutor might assume that the utterance meant "sufficient, fine" when instead it means "barely adequate, with a lick and a promise."

In the following sign string, the letters *a* and *b* indicate locations in space used to mark the beginning and endpoints of signs to allow establishment of a relationship between a noun phrase referent (e.g., WOMAN or MAN) with a point in space (point a or point b). This is accomplished in ASL by signing the noun phrase and then pointing (IX) to a point in space (a, b, etc.). Later pointing back to those locations (IXa, IXb, i.e., pronouns) or verbs that spatially move *from*

or *to* these positions (e.g., bHITa) serve to indicate who did what to whom. Because ASL marks subject and object spatially on the verb many orders are possible. The example below involves topicalization of the object, WOMAN, and the subject MAN in an afterthought position. Information about subject and object in English is conveyed through word order. The noun phrase before *hit* is the subject or agent; the noun phrase after *hit* is the direct object or patient. If one were to voice the nouns and verbs while signing the following grammatical sentence in ASL, a non ASL signer would misunderstand the sentence's intended meaning as "The woman hit the man," but an ASL interpreter would have no problem ascertaining the correct meaning from the subject and object agreement on the ASL verb: "The man hit the woman."

Concurrent mouthing/voicing: woman hit man
ASL signing: WOMAN IXa, bHITa, MAN IXb
meaning of glosses: woman at-point a person-at-point b-hit-person-at-point a MAN at-point b
English Translation: "The man hit the woman."

Obviously, if any factual determinations were being made here without the benefit of an interpreter, dangerous misunderstandings would be possible.

Another potential language-based misunderstanding concerns grammatical facial expressions marking wh-question sentences (those involving *who, what, why, when, how,* etc.) and relative clauses. In spoken languages like English, facial expressions play little role. In fact, for most people facial expressions serve in caricature (making faces) or in showing affect (emotion). However, while these uses are relevant to ASL signers as well, there are also a set of purely grammatical facial expressions that serve an essential grammatical role in the language. Grammatical facial expressions are distinct from affective facial expressions. However, for non-ASL signers for whom these expressions have no distinct grammatical meaning, these expressions are similar enough to be confused with affective facial expressions. Two types of questions are marked by

specific grammatical facial expressions: yes/no questions (questions requiring a "yes" or "no" answer) and wh-questions (questions involving *who, what, where,* etc.). Yes/no questions involve raised eyebrows and a forward projection of the head. Wh-questions involve furrowed brows, a facial expression often also associated with the affective facial expression expressing anger. Question facial expressions sometimes occur over a single wh-word and other times spread across the whole sentence. In these spreading cases they can be easily misunderstood by an observer as affective in nature--in the case of wh-questions as anger.

Relative clauses in ASL are marked by a special facial expression that occurs over the relative clause as in:

rc_____
DOG CHASE CAT COME HOME
"The dog that chased the cat came home."

Without the relative clause facial expression, the same manual string of signs would mean, "The dog chased the cat and came home." If the facial expression spread over CAT COME HOME, the sentence would mean "The dog chased the cat that came home." Relative clauses involve a tensing of the cheek muscles and a raising of the upper lip have been reported to be confused by non-signers with the facial expression for disgust.

Because of the overlap of components of grammatical and affective facial expressions, the likelihood that non-ASL signers observing ASL conversations will misinterpret a signer's emotional affect is increased. Interpreters circumvent this misunderstanding by conveying the signer's actual affect in their voice quality and by explaining the role of grammatical facial expressions if such a misunderstanding were still to arise.

Another potential point is the fact that ASL is a "null subject" language. This means that in cases where the reference is recoverable from context or from agreement on the verb, subjects may be omitted. In fact, it is stylistically preferable to omit them. Note the missing referents (labeled as "[e]") in the following passage:

> [e] TAKE [e]. [e] THINK-BUBBLE-OPENimagine] [e] FLY [e] TAKE THINK-BUBBLE-CLOSE
> 'He (Mr. Koumal) took them (the feathers) and he imagined himself flying.'
>
> [e] CLIMB-UPWARD++ [e] JUMP-OFF [e] [e] FALL-DOWN-right, down
> 'He climbed upward on the mountain, jumped off of it and he fell down.'

Cultural adjustments. Independent of grammar, how individuals express information can vary based on their language and culture. Let's consider a difference between the typical deaf and hearing experience. Hearing individuals are bombarded throughout their day with information about news events and popular culture by radio, TV, overhearing of casual conversation, newspapers, etc. As a result, when hearing people communicate they presume a great deal of shared knowledge about current events and popular culture. Hearing people speak in abbreviated terms because they presume this shared knowledge. Deaf individuals have less access to information in the ambient environment. They must actively seek it out and definitely miss the redundancy of hearing every issue mulled over numerous times in the passive overhearing of others' conversations. A consequence of this is that in introducing a new topic or answering a question, there is a tendency for a deaf person to go to great lengths to establish the background and context of the new information to be conveyed. An answer to a yes/no question can get a prelude that at times seems to the hearing person like an autobiography or daily diary of events. It comes across as overkill. Frequently, the deaf person's response is cut short on the assumption that there is too much irrelevant information and the response is taken to be a non

sequitur. In contrast, a hearing person's conversation comes across to a Deaf person as curt, often sketchy--sometimes as the intentional withholding of information.

In social interactions similar presumptions can leave a Deaf participant feeling left out. Hearing people presume that individuals present at an event can get the gist of what's going on from passive observation and monitoring of the proceedings. But, hearing conversation is crucial to this process. Thus, without a concerted effort to include Deaf participants and fill them in on what is happening, they will remain in the dark.

Nodding. Another problem that arises because of the strain of conversing in a language that is not one's primary language is that frequently the second language user nods as if understanding, even when not comprehending--as a politeness measure, or just to keep the conversation going. Deaf individuals who spend much of their time with hearing people in this state of non-comprehension are prone to doing this. A good interpreter will frequently check that the deaf person truly comprehends the transmitted message by probing with questions or simply checking for explicit comprehension. In a situation with a hearing person where lipreading is used, a deaf person will eventually nod just to get the conversation over with. The hearing person, also pressured by the inability to make oneself understood in this context, readily accepts this nodding as confirmation of comprehension. The desire to believe that lipreading will suffice combined with nodding behavior on the part of a deaf person can lead an individual to attribute unrealistic lipreading abilities to a deaf interlocutor, when in fact, both participants are "faking it." Such interactions can lead to the hearing interlocutors deciding that an interpreter is not necessary, when on the contrary, very little communication is being successfully transmitted. For this reason, it is prudent to heed the request of the Deaf interlocutor when need for an interpreter is expressed.

Background on Components of the Evaluation

I. Linguistic/Cultural Profile:

In research on Deaf individuals, I generally begin with the following cultural profile, which indicates the likelihood that a deaf individual will use ASL as their primary and preferred means of communication. The more positive responses to the questions below (except for the last), the more likely that the individual in question will be culturally Deaf; and as culturally Deaf, will have ASL as their primary and preferred means of communication. Being culturally Deaf means that a person is most comfortable in the company of other Deaf people, uses ASL, and views oneself as a member of a cultural minority rather than as a member of the dominant hearing culture with a pathological deficit—deafness.

Being born Deaf of Deaf parents is a major (but not definitive) factor in predicting ASL as one's primary and preferred language. However, individuals falling into this category are also the most likely to have strongly mastered English writing and literacy skills. This latter correlation is attributed to the fact that such individuals have had a language (in this case ASL) from birth and, therefore, their English acquisition is building upon a strong first language base.

Attending a residential school for the Deaf is another major factor because this maximizes exposure at an early age to good ASL language models and to Deaf culture. Beyond these additional factors indicative of individuals who are likely to be culturally Deaf are the group they choose for social interaction, membership in Deaf organizations, marriage to a Deaf spouse, and choice of an occupation that would also attract other Deaf people. These are attitudinal indicators of cultural affiliation.

To better appreciate a greater feeling of affinity with Deaf peers, the chosen social community of many Deaf people, as opposed to their own families in which they may feel foreign, I recommend reading, *A Journey into the Deaf World*, by Harlan Lane, Robert Hoffmeister, and Ben Bahan (San Diego: Dawn Sign Press, 1996).

The Linguistic/Cultural Profile was initially used in research labs at the Salk Institute in San Diego, CA and the Center for Molecular and Behavioral Neuroscience at Rutgers, The State University of New Jersey. It was developed as a way to independently predict a person's cultural identity as a member of Deaf Culture and the likelihood that American Sign Language was the individual's primary and preferred language. Those labs were working with Deaf individuals who had had a stroke or brain damage as the result of a degenerative process such as Parkinson's disease. The individual would come to us as a research subject after diagnosis and we needed an independent way to determine that the premorbid signing was indeed ASL.

I. 1. Culturally Deaf Responses

Name: NAME **Cultural Profile**

1. **Prelingually deaf?** yes
2. **Deaf parents?** yes
3. **Attended residential school for the Deaf?** yes
4. **Tends to associate primarily with Deaf people**? yes
5. **Is a member of Deaf club**? yes
6. **Married a Deaf spouse or has a Deaf partner**? yes
7. **Traditional Deaf occupation**? yes
8. **Knowledge of decibel loss.** no

A culturally Deaf identity is indicated by yes answers to all but the last question above. A final indicator of cultural identity, number (8) on the profile, is whether an individual knows their db loss (the decibel level at which they can hear). The culturally Deaf indicator is a "no" answer to this question.

I.2 Early Life Choices

The first three questions in the cultural profile address choices made for a deaf individual early in life, typically by their parents—choices over which they have little or no control. Nonetheless, these decisions typically do impact later cultural identity.

I.3 Later Life Choices

The last questions are choices made by the individual later in life and give evidence of cultural identification. *Yes* answers are suggestive of identification with Deaf culture. Identification with Deaf culture is indicative of preference for American Sign Language as one's primary and preferred language.

II. The clients' use of interpreters

Clients are questioned regarding in what situations they would request interpreters as well as when they have used interpreters.

III. American Sign Language proficiency.

To understand whether a client can use an interpreter if one were provided and to understand what the target language interpretation should be, I need to elicit information that informs my sense of the client's proficiency in American Sign Language. I focus on three aspects of ASL competence: ASL production, ASL comprehension, and whether ASL serves primarily the basic interpersonal communication needs of the client, or whether they also have the capacity to use ASL at a more sophisticated level to access information in academic and other learning spheres. For more information about Academic ASL see the ASL in Academics Series available on line from the Office of Bilingual Teaching and Learning at Gallaudet University: http://www.gallaudet.edu/office_of_bilingual_teaching_and_learning/academic_asl/asl_in_academics.html

III.1 ASL Production (Grammar)

It is standard practice in language assessments to pick out certain grammatical competencies that are indicative of grammar mastery as a whole rather than testing every single component of ASL grammar. To test every aspect of ASL grammar would be inefficient and highly redundant. This practice has been followed in the ASL Checklist developed by Dr. Judith Mounty when she was at Educational Testing Services:

> Mounty, J. (1994). *Signed Language Development Checklist.* Princeton, NJ: Educational Testing Service.

I served as the linguistic consultant to Dr. Mounty as she developed this checklist and the training manuals for using it.

This practice was also followed by Supalla and Newport in their development of a *Test Battery for American Sign Language Morphology and Syntax:*

> Supalla, T., Newport, E., Singleton, J., Supalla, S., Coulter, G., & Metlay, D. (unpublished). *The Test Battery for American Sign Language Morphology and Syntax*. http://cbpr.georgetown.edu/researchlabs/slrl/projectsandresearch/psychoneurolinguistics/asltestbattery)

This and other ASL assessments are reviewed in Haug, Tobias. 2009. Review of Sign Language Assessment Instruments. In Baker, A. and Woll, B. (eds.), *Sign Language Acquisition*, vol xi, pp. 51-85.

While never published, the *Test Battery for American Sign Language Morphology and Syntax* has been used and adapted for many research projects and the peer-reviewed articles published in conjunction with them. I was trained by Supalla and Newport to administer this test battery and was given permission to use it in my linguistic research. Before using components of the test battery in expert witness cases, I used portions of it in my neurolinguistic research on individuals with Parkinson's disease and aphasia and

well as the population study I conducted under a National Science Foundation grant in Nicaragua.

In my own research and teaching on the linguistics of American Sign Language, I have identified several grammatical features of ASL that distinguish it in very salient ways from the grammar of English: Figure and Ground constructions and the use of classifiers in verbs of motion and location. In both cases, the word order and grammatical rules are very distinct from English. The following two tasks both tap into Figure/Ground relations, one in the context of locative verbs using classifiers and the next in the context of motion verbs using classifiers.

III.1.a. Verbs of Location (Bowerman Topological Relations Task)

To look at grammar production, clients are presented with a series of 52 line drawings from the Topological Relations Task developed by Melissa Bowerman. These drawings depict numerous locative relations between items (a cup on a table, an apple in a bowl, a book on a shelf, etc.).

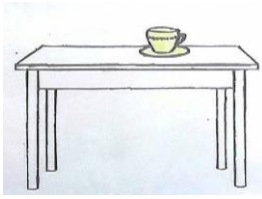
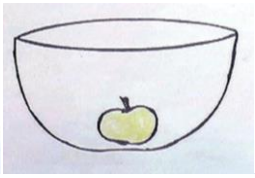
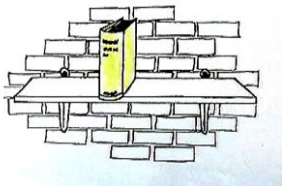


TABLE-CUPON
ground figure



BOWL APPLEIN
ground figure



SHELF-BOOKON
ground figure

In ASL, each stimulus elicits a response that uses classifiers, figure/ground relations, and locative verbs. The constructions elicited are the hallmarks of ASL grammar use.

In American Sign Language, the expected ordering is Ground before Figure as seen in the drawings above. In English, the exact opposite ordering, Figure before Ground is expected. In ASL, the spatial relation (e.g., on, in, behind, etc.) forms the core of the verb; whereas in English this spatial relation is expressed using a preposition. Finally, the English expression of these relations is expressed using full noun phrases as the arguments. In ASL,

full noun phrases can be expressed, but the critical spatial relation is expressed by a complex verb of location that first expresses the location as well as some abstract or physical characteristic of the object that serves as a Ground (e.g., CL:B (flat surface) AT location a—"a flat surface is located at position a." This verb is cliticized to the beginning of a second verb of location that expresses the Figure (e.g., CL:C (cylindrical object) BE-ON location a "a cylindrical object (cup) is on a flat surface located at position a."

The Topological Relations Task was originally designed by Melissa Bowerman to elicit expressions of spatial relations from young children. It was developed further by Bowerman and Pedersen to elicit spatial relations for crosslinguistic comparison, the purpose I am using it for here. These stimuli have been used in linguistic fieldwork all over the world.

Bowerman, M. and Pederson, E. (1992) Topological relations picture series. In S.C. Levinson (Ed.), Space Stimuli kit. Nijmegen: Max Planck Institute for Psycholinguistics. (http://hdl.handle.net/11858/00-001M-0000-0011-5614-1).

III.1.b. Verbs of Motion Production (VMPA, from the Supalla, et al. Test Battery)

The *Verbs of Motion Production Task, Version A* (VMPA) from the *Test Battery of American Sign Language Morphology and Syntax* is parallel to the *Topological Relations Task*, except that it focuses on verbs of motion rather than verbs of location. Like the Topological Relations Task, each stimulus elicits a response that uses classifiers, figure/ground relations, and locative verbs. Similarly, the motion verb constructions elicited in this task are also among the hallmarks of ASL grammar use.

A language like English has a relatively fixed vocabulary supplemented by word formation rules that can supplement that basic lexicon. A language like ASL or Navajo is distinctively different. Rather than a large lexicon of pre-formed frozen signs, ASL has a very productive word formation morphology that is constantly creating words anew. Verbs of motion and location and classifiers use the very productive word formation morphology in ASL to construct words productively. Some of these words end up conventionalized and in a vocabulary that can be listed, but even those tend to have a transparent internal organization that reflects the word formation process. Like Greenlandic Eskimo, ASL has

verbs that are really sentential in nature. They include a basic action as well as all the nominal arguments involved and the roles they play (source, goal, agent, etc.). Like sentences, which allow an infinite set to be produced, the ASL lexicon has that same richness.

Verbs of motion and location and the classifiers that they contain allow ASL to produce spatially precise and three-dimensionally descriptive verbs that are able to serve the demands of the very visually oriented and attuned signers that use this language. They are a challenge for non-native interpreters to master, but mastery of this component of the grammar is critical.

Medical terminology is rife with words that are comprised of complex morphology. Consider the longest word in the English language:

Pneumonultramicroscopicsilicovolcanoconiosis which is the medical term for black lung. Much information is packed into this term:

pneumon- relating to the lungs

ultra- extremely

microscopic-so small you need a microscope to see them

silico-a naturally occurring mineral in rock and soil (silica)

volcano- from volcanos

coni-a cone-shaped area of the right ventricle from which the pulmonary artery emerges

osis- disease

The word tells us that this is a lung disease, particularly affecting the cone-shaped area of the right ventricle of the heart that is caused by the inhalation of microscopically fine silica dust typical of what is found in volcanos.

English is happy with *black lung* and if you know what black lung means you are fine. However, *black lung* does not translate into ASL in any way that makes sense. ASL uses something more like the latinate system of word formation medical terminology uses.

Word formation rules that create verbs of motion and location, nominalizations of those verbs create another set of constructions in ASL called size and shape specifiers

(SASSs) that sculpt the shape of objects in space allow ASL to visually create message equivalent forms in ASL for critical medical terms. The CATIE center at St. Catherine's University in Minnesota offers trainings nation-wide, DVD trainings on medical terminology and the discussion of medical systems such as the cardiovascular system, the gastrointestinal system among others. These training share in common a focus on using verbs of motion/location and classifiers to convey these concepts. (http://minerva.stkate.edu/offices/academic/interpreting.nsf/pages/medicalinterpreting)

The ASL production stimuli elicit evidence of the extent to which clients use these aspects of ASL grammar and would comprehend them with ease.

III.2. ASL Comprehension

In addition to predicting comprehension from the grammar used in producing ASL, the assessment also includes other ways of determining comprehension of ASL and also familiarity with more pidginized or contact forms of ASL that incorporate features of English. Exploration of comprehension of different forms of signing is threaded through the background conversation that occurs throughout the testing. A more specific assessment of ASL comprehension is done using a videotape of an ASL story signed by a native signer.

III.2.a. Background Conversation

Testing begins with a background conversation where I elicit information that informs the cultural profile. During this initial portion of the testing, I try to maintain a more ASL use of signing. As a hearing signer of ASL, it is important that the clients feel comfortable using ASL with me. As we move into more of the English oriented paper and pencil tasks I weave in and out of different forms of signing to see not only what is understood and what isn't, but the client's comfort with receiving these other forms of signing.

III.2.b. *Bird of a Different Feather* (signed by Ben Bahan)

Since I am not a native signer of ASL, I include a second comprehension task involving the signing of a 20-minute story by a native user of ASL who is a renowned storyteller, *Bird of a Different Feather* by Ben Bahan.

Supalla, S. and Bahan, B. (1994). *ASL Literature Series*, Teacher's Edition. San Diego, CA: Dawn Sign Press. [Workbook and DVD]

This is an allegorical tale about a straight-beaked bird born into a family of curved-beak eagles. The story examines the family's response to this "different" family member with many experiences that mirror the experiences of a deaf child growing up in a hearing family. I tend to show the story chapter by chapter through the part that mirrors the family's decision to pursue surgery (for a deaf child this would be a cochlear implant) to make the bird more like them. Clients are asked to summarize the story in ASL. I look for both consistent comprehension and awareness of Deaf culture. The goal is to also see if the client will analyze the story and realize it is an allegory referring to the Deaf experience and then to see how they talk about that analysis.

III.2.c. A Classifier Story (DWI by David Rivera)

In some cases where comprehension of classifiers is a focus, I will also have clients view a classifier story in ASL by a Deaf storyteller named David Rivera. Classifier stories make a point of using only the productive set of classifiers, SASSs, and motion/location verbs and avoiding any lexically frozen signs.

DWI was a story that Rivera signed at a competition called Deaf Idol in New York City (September 13, 2008), qualifying him for the finals of the competition. I use a version that he signed to me over the videophone when we were preparing a workshop on classifiers. I use this video because I know that clients will not have had access to it

elsewhere. Similar work by Rivera can be viewed at:
http://www.youtube.com/watch?v=ueTrYy7OA4g.

III.3. BICS vs. CALP

When looking at language competency, it is important to look at the functional abilities a given individual has, particularly when looking at a second language. In the case of Deaf individuals who come to ASL late, this is also an area that needs to be examined. In 1979 Jim Cummins introduced two terms that describe the functionality of an individual's grammar: Basic Interpersonal Communication Skills (BICS) and Cognitive Academic Language Proficiency (CALP).

III.3.a. Basic Interpersonal Communication Skills (BICS)

BICS is needed to socialize and the more one socializes the more fluency in BICS is attained. As long as you aren't in school, going to court, seeing a doctor, or in any situation where you have to glean information in a low context and highly cognitively demanding situation, BICS will do.

III.3.b. Cognitive Academic Language Proficiency (CALP)

CALP is needed to succeed in learning environments, to take tests and to have unfamiliar cognitively demanding information transmitted in low context situations. CALP is needed for metalinguistic and metacognitive awareness and learning.

Cummins work focused upon bilingual immigrants learning a second language, but the distinction applies to Deaf language users as well. The notion of fluency in a language can be misleading. Within two years of language exposure most hearing immigrant children demonstrate fluency in communicating with their peers in social contexts. Teachers also tend to view them as fluent users of the language, yet in classes, tests, and cognitively demanding situations that move beyond the everyday social interactions one engages in, apparently fluent individuals with BICS do not perform on

a par with their academic peers. Cummins discovered that despite the fact that teachers noted that peer-appropriate conversational fluency in English developed rapidly (within about 2 years), "a period of 5-7 years was required, on average, for immigrant students to approach grade norms in academic aspects of English." In other words, while BICS developed in two years, CALP took 5-7 years to develop.

This is the pattern for individuals who are learning language and can also hear it spoken around them continually. Deaf individuals do not necessarily follow this same trajectory, even in their first language. A Deaf child of Deaf parents who is exposed to ASL (a first language from birth) and who attends a school for the Deaf where the teaching is in ASL and peers use ASL would be expected to develop CALP in parallel with hearing peers, and with CALP in place in the first language, these individuals may follow a similar trajectory as hearing immigrants in terms of developing CALP in a second language. Although d/Deaf students are not getting the same constant auditory exposure to English that hearing peers get; nonetheless, the better d/Deaf readers and writers tend to come from this group.

A deaf child with hearing parents may enter school without any fluency in ASL or English. Those that enter a residential Deaf school like the one described above are then entering school as an immigrant child might. They would be expected to have fluent BICS in two years and catch up to their native ASL signing peers within 5-7 years.

However, the language exposure experiences of deaf children are extremely diverse. Some children come from hearing families who do not sign and attend mainstream schools where they are expected to access their education via interpreters. They may be the only deaf student in the school and the skills of interpreters can vary greatly. While they may do well, there is also the possibility that coming to school without ASL and only having exposure to ASL in the classroom and not socially, we may see BICS seriously delayed and CALP may never be developed. If CALP is seriously delayed or not present in the first language, we can expect repercussions in learning a second language, English. For this reason, it is important to look at both the Basic Interpersonal Skills (BICS) and the Cognitive Academic Language Proficiency (CALP) of each client.

Cummins, J. (1979) Cognitive/academic language proficiency, linguistic interdependence, the optimum age question and some other matters. *Working Papers on Bilingualism*, No. 19, 121-129.

A short explanation of BICS and CALP by Cummins appears on-line at http://iteachilearn.org/cummins/bicscalp.html.

IV. English Proficiency

To form an opinion about the English proficiency of a client, various aspects of English production and comprehension need to be looked at: speech, lipreading, writing, reading, and vocabulary. I will address these different areas separately, but they do interact. For example, you cannot lipread a vocabulary item you are unfamiliar with. Also, reading and vocabulary knowledge are so intertwined that most reading assessments are really relying primarily on vocabulary level.

IV.I. Spoken English Competency

I elicit a sample of spoken English using two 1.5-minute, nonverbal Czech cartoons: *Mr. Koumal Flies like a Bird* and *Mr. Koumal Battles his Conscience*. The client views the cartoon as many times as is needed (typically 2) and is asked to recount the story three ways: signed, written, and spoken. The content of the cartoons appear in Section V. on narrative production near the end of this report. The spoken version is used for the analysis of speech.

IV.1.a. Speech Skills

Spoken English Competency is assessed in three ways: for quality, intelligibility and for the impact that it has on communication.

IV.1.a.i. Speech Quality

The assessment of speech quality is made by observing a number of features. Does the client produce recognizable syllables? If the word is bisyllabic, can two distinct syllables be discerned? Are the vowels in each syllable recognizable as the intended target articulation? Are

the consonants clearly articulated and can they be recognized? Are the onsets and offsets of the syllable produced and recognizable? Are consonant clusters reduced or omitted? Are voiced versus voiceless distinctions made? Is the amplitude (loudness) of the speech controlled?

IV.1.a.ii. Intelligibility

The intelligibility of speech is looked at in two ways, with and without visual cues. Remember that I know the content of the passage, so I have an advantage in terms of recognizing speech produced that individuals unfamiliar with the text would likely miss. At times I will play the speech for someone unfamiliar with the text to get a sense of what it would be like to understand without context. In addition, I am a certified Oral Transliterator and am proficient lipreader familiar with Deaf speech. So, my assessment gives an advantage to the speaker.

IV.1.a.ii.1. Auditory monitoring alone

I listen to the spoken sample and determine a rough percentage of what I can recognize without lipreading the client.

IV.1.a.ii.2. Lipreading and auditory monitoring

I then look at the signer while monitoring the speech to see to what extent lipreading aids my understanding. In addition, I carefully transcribe the spoken narrative to the best of my ability stopping and rewinding the tape, and attending to any signing that may be concurrent with the speech etc.

IV.1.b. Lipreading

The lipreading task involves two presentations of each stimulus (either a word or whole phrase or sentence). Each presentation is loud and very precise. There are 64 lipreading stimuli in all: 17 single words and 47 phrases of varying length. It is important to note that only 30% of members of the deaf population have enough residual hearing and other capacities to allow them to be successful lipreaders. And even then, excellent lipreaders

get at best 80% of what they lipread with very high use of context. Having had speech training is no assurance of success.

IV.1.b.i. Words

The single words are all words a Deaf client would typically be expected to know.

IV.1.b.ii. Sentences and Phrases

The words and phrases were constructed to feature several different characteristics: highly routinized expressions that a deaf lipreader would encounter frequently (e.g., *What's your address*?; *What time did you show up for work this morning*?); sentences that are infrequent (e.g., *I like to visit the zoo; The circle is a round drawing*); numbers alone (42, 1996) and numbers in context (e.g., *President Kennedy was shot in 1963*); sentences that might be encountered in a medical or law enforcement context (e.g., *Do you have a living will?; You have the right to remain silent);* and a few phrases that are known to be homophenous (look alike) on the lips (e.g., *green beads, red beans*).

IV.1.c. Impact on communication

Finally, I look at the impact on communication. How comfortable is the Deaf client using speech? Does the speech have characteristics that might juvenilize the client in the minds of others? Does the client limit speech to words that can be pronounced or does the struggle with speech result in putting out less information? This last point will be examined later in the section on narrative production.

IV.2. Written English Competency

The client's written English competency was looked at in two ways: argument structure analysis and grammaticality. The purpose of an analysis of the client's argument structure distribution is

to look for any patterns that might suggest that the individual has a frank aphasia or other organically based syntactic deficit that would account for any problems with written language. The purpose of the grammaticality analysis is to look at mastery of standard English grammar.

IV.2.a. Argument Structure Distribution: Data Collection

The client's skills in written English were tested by eliciting sample written narratives generating at least 150 clauses with their verbs and associated noun phrase arguments. Two means of elicitation were used.

IV.2.a.i. Movie Recountings

The client was asked to watch three movies at home and then recount their content in writing and was not to ask for help from anyone and not to erase any portion of the work, although cross outs were permitted. These movies were captioned. Several movies are suggested just because they seem to appeal to Deaf viewers and similar movies make some of the comparisons easier. However, clients are given the option of choosing their own movies or recounting a favorite movie as well as some of the others. Movies typically suggested are: *Moonstruck, Bringing up Baby, Overboard, On the Waterfront*, and *The Natural*. These were also uses to elicit narratives in prior studies of agrammatic aphasics conducted by Myrna Schwartz, Elinor Saffran, and Rita Berndt. (See reference below: Berndt, et al. (2000).) I was trained in this procedure by Myrna Schwartz and continued to use the elicitation of such narratives in my own research on agrammatism as well as in these assessments. Over time, *Titanic*, a popular movie with Deaf viewers was added to the set of suggestions. An argument structure analysis requires 150 verbs and their arguments to be elicited. Watching three movies on site and recounting them in written English would take a prohibitively long time. So these are collected at home and either mailed to me or submitted at the face-to-face testing session.

IV.2.a.ii. Nonverbal Cartoons

As a check on consistency for the narrative task done on-site versus at home, two shorter narratives were elicited during testing and were also analyzed separately for their argument structure distribution. In this way, the same narrative was also collected from every client assessed, over 150 to date. Collection of a sample during testing was done to control for any reliance on captioning to generate the written narratives, or reliance on other resources for help with writing such as dictionaries, spell checkers, or friends and family members.

Along similar lines, Berndt, et al. elicited the same *Cinderella* narrative from each of their subjects. These Cinderella narratives were elicited by viewing a picture book of the Cinderella story as a memory aid.

> Berndt R, Wayland S, Rochon E, Saffran E, Schwartz M. Quantitative production analysis: A training manual for the analysis of aphasic sentence production. Hove, UK: Psychology Press; 2000.)

However, Deaf individuals don't have the same experience with English stories that hearing individuals have. Instead, I chose to use two 1.5 minute Czech cartoons to elicit the written narratives on site: *Mr. Koumal Flies Like a Bird* and *Mr. Koumal Battles his Conscience.* Parallel with the elicitation of the speech sample mentioned earlier, clients can watch the short video as much as they like (typically twice) and then write their rendition of the story.

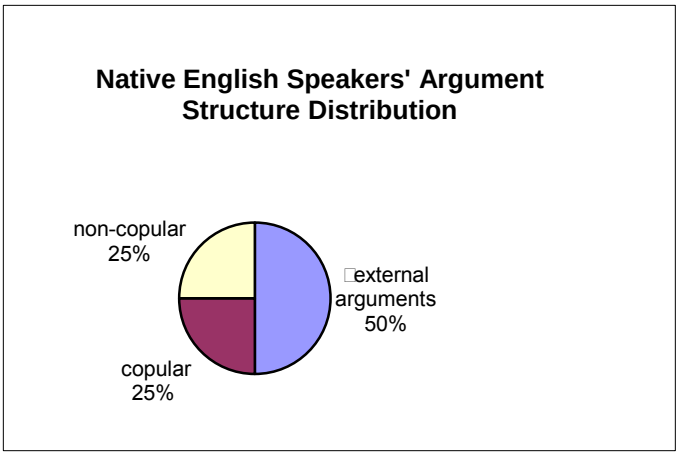
IV.2.b. Argument Structure Distribution: Data Analysis

The written English narratives were retyped into an Excel file and each verb produced was isolated and coded with respect to the number and type of noun phrase arguments it requires as well as whether all those arguments were expressed. This coding assumes that there are three possible arguments: external, direct, and indirect. These three types of arguments fill the subject, direct object, and indirect object positions relative to the verb at a lexical level of representation before any syntactic operations have applied.

Once the argument structure distribution for the client is determined, it is compared with the argument structure distributions of four distinct groups of writers of English: 1. typical hearing speaker of English; 2. individuals with a particular form of aphasia called agrammatism, which impacts their ability to perform syntactic operations; 3. Deaf signers of ASL writing English; and 4. Deaf non-signers writing English.

IV.2.b.i. Group 1: typical hearing speakers of English

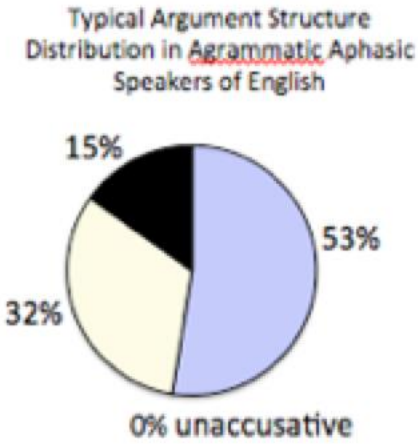
Research on hearing individuals writing English has revealed that just slightly over 50% of the constructions produced tend to be those requiring an external argument. The remaining two types of unaccusative constructions tend to be divided evenly between copular constructions and other unaccusatives. For comparison purposes, we can imagine an idealized pie chart of the following sort:



IV.2.b.ii. Group 2: speakers with agrammatism producing English

The second group consists of individuals with a form of aphasia that directly impacts their ability to perform syntactic operations. These are typically called agrammatic aphasics. These individuals produce those constructions that adhere most closely to the arrangement of noun phrases and verb that is specified in the lexicon before any syntactic rearrangements would occur. In English these would be the constructions that have external arguments. In case of agrammatism, the non-copular unaccusatives, which require

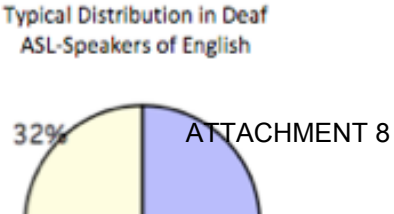
overt syntactic movement are absent. In addition, there are many uncodable utterances. And, the category copulars, which are transparent in their ordering expands to cover the missing unaccusatives with simple circumlocutions. The argument structure distribution for individuals with agrammatism appears below:

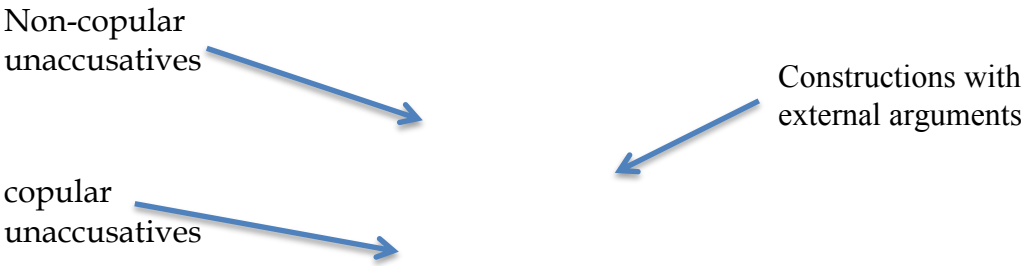


If a client has a syntactic deficit we would expect this sort of patterning. A syntactic deficit tied to a learning disability or acquired aphasia is different from lack of syntactic mastery resulting from language deprivation or incomplete mastery of a given language.

IV.2.b.iii. Group 3: Deaf ASL signers writing English

In contrast with the avoidance of unaccusative constructions in agrammatic aphasics, Deaf users of English whose primary and preferred language is ASL tend to have an expanded use of the category of non-copular unaccusatives. This may be attributable to the rich use of verbs of motion and location in ASL, which tend to be non-copular unaccusatives. The occurrence of copular constructions is also very reduced. So, Deaf ASL-signing individuals writing English produce a preponderance of the unaccusative constructions that require syntactic operations to be well-formed and are harder for English speaking agrammatics to produce. And, they also produce fewer copular constructions, the easiest construction for individuals with agrammatism to produce.





IV.2.b.iv. Group 4: non-signing deaf individuals writing English

The reduction in the use of copular constructions seen with Deaf ASL-signers is not limited to that group. Copular constructions typically involve contraction of the unstressed *is* onto another element in the sentence. The low acoustic salience of these copulars may account for their reduced occurrence in the English of Deaf ASL signers. Support for this comes from the fact that this generalization holds not only for signing Deaf individuals, but for deaf individuals who adhere to an oral philosophy of communication as well (deaf non-signers). This means that the absence of copular constructions is characteristic of the English of both signing and non-signing deaf individuals. The inconsistent use or omission of copulars was also noted in Berent (1996):

Berent, G. (1996). The acquisition of English syntax by deaf learners. In Ritchie, W. and Bhatia, T. (eds.), Handbook of Second Language Acquisition. San Diego, CA: Academic Press.

For background on the use of argument structure as an indicator of syntactic deficits see:

Kegl, J. 1995. "Levels of Representation and Units of Access Relevant to Agrammatism." *Brain and Language,* 50, 151-200.

For background on argument structure distribution in ASL and PSE signers see:

Kegl, J. and H. Poizner. 1997. "Crosslinguistic/ Crossmodal Syntactic Consequences of Left-Hemisphere Damage: Evidence from an Aphasic Signer and his Identical Twin." *Aphasiology*, vol. 11, no. 1, pp. 1-37

Kegl, J., Baynes, K., Brentari, D. and Poizner, H. 1996. "Landau-Kleffner Syndrome: Modality Independence of Linguistic Competence." *Society for Neuroscience 26th Annual Meeting: Abstracts. Part 1*, pg. 184.)

IV.2.c. Specifics of English grammar production

The results discussed above are based upon the argument structure patterns exhibited by an individual, but a person can have a limited mastery of English but still show the ability to produce the full range of argument structures.

Examination of argument structure distribution addresses the question of whether an individual writer's capacities for language at the level of syntax are intact as well whether the pattern of argument structure distribution resembles that of hearing individuals native in English, d/Deaf individuals writing English, or Deaf individuals with ASL as a primary and preferred language. They are not indicative of the individual's mastery of aspects of English-specific grammar rules. A person can have a limited mastery of English but still show the ability to produce the full range of argument structures.

The same narrative data elicited for the argument structure distribution analysis can be examined from the point of view of grammaticality to get a sense of how proficient an individual is in following the grammatical rules of English. In this section of the assessment, examples are drawn from the narrative sample to give a feel for the kinds of errors one would encounter in reading the clients' narratives. Where relevant, errors that are related to the use of ASL as a first language will be noted. A deaf person's English writing is often awkward to a non-ASL signer, but is clear to one familiar with ASL grammar.

The data will be divided into various types, corresponding to the various levels of linguistic structure: lexical (errors in word choice or word category (noun, verb, adjective, etc.)), morphological (errors in the application of morphological rules like the marking of person, number and tense or any word formation rules), syntactic (errors at the level of the sentence

regarding the formation of questions, relative clauses, passives, etc.), and semantic (errors related to meaning).

IV.2.d Reading

Presentation of sentences and passages that are designed to be at specific grade-levels is still the standard for reading assessments. The methodology I use throughout is to present the client with pre-vetted materials independently determined to be at specific grade levels. My interpretation of performance on those grade-level materials is complemented by my own syntactic analysis of the materials and knowledge of Deaf readers. The results I come up with are always at or above the level the individual would be determined to be at in a stricter application of the assessment.

There is no standardized reading instruments that can adequately assess d/Deaf readers of English because of the highly varying degrees of exposure to English they may experience. Many reading inventories, even the *Flynt Cooter Reading Inventory* used here are inadequate as a standardized reading test for Deaf individuals. When grade-level sentences and passages are used there are still confounds like the use of figurative language that will cause d/Deaf students problems. Educators and psychometricians agree that the best assessment for d/Deaf readers is individualized rather than standardized. But this isn't feasible in large populations. It is possible in a single case study such as the one being used here. The approach I take is a mixture of the two. I use the standard practice of selecting pre-vetted grade-level sentences and reading passages for testing, but I also bring to the task awareness of factors like figurative language and differences in incidental exposure to vocabulary and syntactic constructions.

In most assessments of reading, vocabulary level is coupled with reading level. This is most blatantly evident in the San Diego Screening that will be discussed below. In fact, almost all reading tests are at heart vocabulary tests. Yet the critical benchmark between a third- to fourth-grade reading level and above that level that is invariably

attributed to a sizeable portion of d/Deaf readers has little to do with vocabulary. It concerns whether an individual can use syntax for reading comprehension.

The classic case is mastery of the passive voice. Consider the sentence *The dog bit the mailman*. We use our syntactic knowledge that English is a Subject-Verb-Object (SVO) language to determine that *the dog* is the subject/agent and *the mailman* is the object/patient. However, we also just know from world experience that dogs tend to bite mailmen, and not vice versa. It is possible to understand the sentence without resorting to any syntactic analysis. The same thing is true for the following passive sentence: *The mailman was bitten by the dog*. One doesn't need to resort to syntactic processing to get the right understanding of that sentence. But, now consider another passive: *The dog was bitten by the mailman*. To understand that the meaning of this sentence runs counter to our expectations, we must understand that it is a passive. The divide between the level at which a large number of deaf readers plateau and beyond is the point at which syntactic mastery impacts reading. This is also the point at which reading is no longer a skill to master, but becomes access the rest of one's education and to information that is unknown and unexpected. Without syntactic processing, Cognitive Academic Language Proficiency (CALP) is unattainable.

For d/Deaf people reading at a fourth-grade level or below passive morphology poses a problem. Many have reanalyzed the passive morphology *was VERB+ed/-en* as an alternate past tense ending. In fact, they regularly use it in their writing as in *The dog was bitten the mailman*, meaning "The dog bit the mailman." Or, more commonly with the –ed ending as in *Mary was killed John*, meaning "Mary killed John." The ability to do a linguistically based single case study analysis that connects an individual's production with issues of comprehension reveals much more than pooled results yielded by standardized tests. This is my reason for taking the approach that I do.

The following sources place the average reading level of Deaf individuals at a 3-4th grade reading level. Only 10% of the deaf population is reported to have an above 8th grade reading level.

Numerous studies have addressed the reading and English grammar levels of Deaf individuals:

Berent, G. P. (1993). Improvements in the English Syntax of Deaf College Students. Annals of the Deaf, 138(1), 55-61. [excellent overview of the literature]

Quigley, S.P. and King, C.M. (1980). Syntactic performance of hearing impaired and normal hearing individuals. Applied Psycholinguistics, 1, 329-356. [The 18 year old students who participated in these studies (begun in 1973) performed at significantly lower levels than the 8-year-old hearing participants on all structures investigated.]

Quigley, S.P., Wilbur, R. B., Power, D. J., Montanelli, D.S. , and Steinkamp, M. (1976). Syntactic structures in the language of Deaf children. Urbana, IL: Institute for Child Behavior and Development. [Analyzing reading materials commonly used with deaf students in the above study, found that many deaf students were not able to process the very reading material from which they were supposed to be learning]

Conrad, R. (1977). The reading ability to deaf school leavers. British Journal of Educational Psychology, 47, 138-148. [Reports that about half of all 18-year-old deaf students read at or below fourth-grade level]

Trybus, R. and Karchmer, M. (1977). School achievement scores of hearing impaired children: National data on achievement status and growth patterns. American Annals of the Deaf, 122, 62-69. [similar findings to Conrad's]

The following is an excerpt from the most recent source on this matter:

Paul, Peter V. 1998. Literacy and Deafness: The Development of Reading, Writing, and Literate Thought. Boston: Allyn and Bacon, p. 23.

...it is well documented that most students with severe to profound hearing impairment do not read as well as their hearing counterparts upon graduation (Allen, 1986; CADS, 1991; King & Quigley, 1985; Quigley & Paul, 1989). The recent findings on the SATs are similar to those reported for the unadapted versions of achievement tests in the early 1900s (e.g., see research review in Quigley& Paul, 1986). Two general findings can be stated. One, the results consistently reveal that average 18- to 19-year-old students with hearing impairment are reading no better than average 9- 10-year-old students with typical hearing. Two, the results show an

> annual growth rate of only 0.3 grade level per year with a leveling off or plateau occurring at the third- or fourth-grade reading level. There is also some agreement that these general achievement batteries might be overestimating the reading ability of students with hearing impairment (Davey, LaSasso, & Macready, 1983; Moores, 1987). Thus, the true reading achievement levels of most students in special-education programs may be even lower than the levels reported.

The client's reading was looked at through various lenses that work together to offer insight into the individualized reading abilities that inform my expert opinion. These methods all shared the standard presentation of vetted grade-level reading materials and was accompanied by my syntactic analysis of those stimuli, except in the case of the San Diego Screening, which uses only words.

IV.2.d.i. Fifth and Twelfth Grade Reading Screening

The first step is a "down and dirty" reading screening that roughly indicates what level to focus upon. Two reading passages were chosen—one at a fifth grade reading level (5.5; *Adolescence*), another at a twelfth grade reading level (12.0; *Stages of Written Language Development*). The reading level was determined by feeding the passages through a word processor, Microsoft Word, which gave information back about the reading level of the text. This was a feature of the word processor relying upon (Flesch/Flesch Kincaid Readability Tests: Flesch Reading Ease and Flesch Kincaid Grade Level) designed to support readability. These tests are used extensively in education. (see http://en.wikipedia.org/wiki/Flesch%E2%80%93Kincaid_readability_tests#Flesch_Reading_Ease). The determination of readability is based upon number of words and length of sentences.

The two passages I chose were determined to be at level 5.5 and 12.0 respectively. These grade-level reading passages are presented on paper and the client is first asked to look them over and circle any words unrecognized. Later the client is asked to read each passage and tell me what they were about.

The following passage, *Adolescence*, is at the fifth-grade level (5.5):

Adolescence – A General Discussion (1999)

We all know what adolescence is about: change.

Children at this stage are beautiful to those of us who are no longer young. They have youth – no wrinkles, no spare tire, plenty of stamina, and a full set of teeth.

But most teenagers don't feel beautiful. Their bodies are changing and change increases stress, especially when there is no control over the timing or direction.

From: Bradford, Tom. 1991. *Say That Again, Please!: Insights in dealing with a hearing loss*. Dallas: Thomas H. Bradford, p. 42.

In a passage like this, a reader below the 5th grade level will typically circle *adolescence*, *stamina*, and possible *increases*. They often will not circle *spare tire,* even though they can recognize that the literal meaning makes no sense in this context and they don't know the figurative meaning of *spare tire*. They will also not circle *set*, even though they may not recognize *set* in the context of *set of teeth*. Once they have read and summarized the passage, we go back over such words to probe for comprehension.

The next passage, *Stages of Written Language Development*, is at the twelfth-grade level (12.0):

Stages of Written Language Development (1999)

On the one hand, the use of the word stages is reflective of an empirical, particularly quantitative, world view of the development of writing. Indeed much of the information in this area has been dominated by quantitative research methods relating mostly to a comparison of the products relative to chronological age, mental ability, or some other yardstick. An inspection of the products of writing does not necessarily preclude the manner (i.e., process) in which writing can or should be developed.

In a passage like this, a reader below the twelfth-grade level will typically circle *empirical, quantitative, chronological, yardstick*, *preclude*, and possible *dominated.* They won't circle *stages*, but many will interpret it literally as a theatrical stage. They won't necessarily circle *world view*, but they will not get the nuance of the meaning of the phrase.

All I am looking for with this screening is a rough sense of whether the person is likely to read below a fifth-grade level, at or above a twelfth-grade level, or somewhere between the two.

A second insight offered by this task is a sense of how the individual approaches reading. Better readers tend to read silently to themselves and upon completion give a summary and answer questions regarding the text. Poorer readers "read aloud." They go through the text word by word giving a sign for each word and fingerspelling any words they don't know. Often the signs provided are not the conceptually accurate ones, but rather the most frequent sign associated with that word. For example, in reading *chairman of the board*, they might sign BOARD, meaning "flat piece of wood." They are coding the information word by word, but are not processing for meaning. Because of educational practices, it is difficult to get some d/Deaf readers to read silently. A range of behaviors between these two poles is also seen.

IV.2.d.ii. Flynt-Cooter Reading Inventory

The Flynt Cooter Reading Inventory is what is referred to as an informal reading inventory designed for teachers looking for levels of materials or basal readers to work with their students on. (Basal readers are highly planned, vocabulary controlled readers designed for specific grade levels.) The Flynt Cooter Reading Inventory provides two sets of grade-level reading materials ranging from pre-school to 9th grade. There are two forms. A and B. I use materials from Form A. This inventory is often recommended for working with diverse students and students in special education.

To pin down the reading level more precisely, I present clients with a series of graded reading passages taken from the *Flynt-Cooter Reading Inventory*. This reading inventory presents a set of three sentences at each grade level to screen for reading ability. Based on performance with the screening sentences, the individual is then presented with a reading passage at one or more of the targeted grade levels to better determine the reading level.

Flynt, E. Sutton. and Cooter, Jr., Robert B. 1998. *Flynt-Cooter Reading Inventory for the Classroom* (Third Edition). Upper Saddle River, NJ: Merrill.

The test materials are the same as those in the 2007 edition. Because I prefer to have the same materials for all clients, I have chosen not to upgrade to the most recent version of this inventory.

Prior to picking grade-level passages for reading, the client is presented with all of the sentences from Form A Levels 1 (first grade) through 9 (ninth grade). The reason for this is that deaf readers vary greatly in their exposure to English and do not follow the standard patterns found among readers of English. They must be looked at individually. Three sentences are presented at each grade level. The client is asked to indicate any vocabulary they didn't know and then to read each of the sentences at each level and tell me what they mean. Technically, getting all the sentences correct up to some grade level would determine the grade-level text that would be first presented, but there are idiosyncrasies in many deaf individual's development of English. So, using the grade-level sentences and passages as a guide, I am more flexible in my assessment of performance on these materials. Most of the deaf consumers I test will score higher on these materials in terms of grade level than they would on the stricter criteria used in testing with hearing individuals.

The grade-level sentences are presented below with annotations concerning points that I am flexible with.

FORM A: Level 1

1. He wanted to fly.
2. The family got together.
3. The boy was jumping.

FORM A: Level 2

1. I was walking fast to town.
2. She cried about going home.
3. I was pulled out of the hole. [This is a passive. I would note it, but would not rule out this level or above if it were missed.

FORM A: Level 3

1. The forest was something to see.
2. I was enjoying sleeping when my Mom called.
3. I had to go to bed early last night.

[figurative, I would not rule out this level or above if this were missed.]

FORM A: Level 4

1. I dislike being the youngest.
2. I'm always getting into trouble.
3. They insisted on watching the show daily.

FORM A: Level 5

1. Athletic shoes come in all kinds of colors.
2. Serious players manage to practice a lot.
3. A cheap pair of shoes doesn't last very long.

FORM A: Level 6 M

1. He was searching for the evidence.
2. She realized the rock formations were too high.
3. The conservationist hoped to reforest the mountain.

FORM A: Level 7

1. Unfortunately, she was confused about the next activity.
2. The submerged rocks were dangerous.
3. She disappeared around the bend at a rapid rate.

FORM A: Level 8

1. Ascending the mountain was rigorous and hazardous.
2. The cliff provided a panoramic view of the valley.
3. The incubation period lasted two weeks.

FORM A: Level 9

1. The abduction made everyone suspicious.
2. The detective was besieged by the community.

3. Her pasty complexion made her look older.

Based upon performance on these sentences, I then present the appropriate grade-level text from Flynt Cooter, Form A for the client to read. I present that text and at least one above and below until it can be determined which level the client most comfortably reads at.

IV.2.d.iii. San Diego Screening

One final screening test serves to corroborate my assessment of reading level. The *San Diego Quick Reading Assessment* is a quick screening based upon selected vocabulary alone that determines the reading level at which one would be expected to read independently (missing one or fewer words); to read well with educational supervision (missing two), to read with frustration (missing three or more).

I had noted earlier that at the heart of all reading assessments is grade-level vocabulary. This test takes this idea to the extreme and presents only vocabulary. Surprisingly, it does almost as well as the other assessments in terms of predicting reading level. However, it doesn't give the added information that seeing the client read or examining the results of the Flynt Cooter materials can offer. The stimuli for the San Diego Screening are presented below. The numbers in each box indicate the grade level.

1	2	3
road	our	city
live	please	middle
thank	myself	moment
when	town	frightened
bigger	early	exclaimed
how	send	several
always	wide	lonely
night	believe	drew
spring	quietly	since
today	carefully	straight
4	**5**	**6**
decided	successful	bridge
served	business	commercial
amazed	develop	abolish
silent	considered	trucker
wrecked	discussed	apparatus
improved	behaved	elementary
certainly	splendid	comment

entered realized interrupted	acquainted escaped squirming	necessity gallery relativity
7 amber dominion sundry capillary impetuous blight wrest enumerate daunted condescent	8 capacious limitation pretext intrigue delusion immaculate ascent acrid binocular embankment	9 conscientious isolation molecule ritual momentous vulnerable kinship conservatism jaunty inventive
10 zany jerking nausea gratuitous linear inept legality aspen prevaricate barometer	11 galore rotunda capitalism amnesty risible exonerate superannuate luxuriate piebald crunch	

IV.2.d.iv. Reading behaviors

Finally, I ask about reading behaviors. What magazines, books, or newspapers does the client read? Are they comfortable with the captioning on TV? I also look at behaviors while reading such as reading silently or "reading aloud," a rather perverse linking of sign to word and fingerspelling unknown words that can take a person through a text without actually processing the content of the material. This type of reading is often detrimental to the task at hand.

IV.2.e. Vocabulary

Processes such as lipreading, reading, writing, and speaking English are inextricably intertwined with knowledge of vocabulary. You can neither read nor lipread words that you are unfamiliar with.

To assess vocabulary skills, the client was presented with a list of vocabulary items at the twelfth-grade level, and then terminology typically encountered in medical, law enforcement, as well as everyday contexts and was asked to circle all words recognized. Later in the testing we return to the lists. The client is asked to demonstrate familiarity with each of the circled words. The client doesn't need to know the exact definition, but is only required to demonstrate familiarity, by giving a synonym, a related word, or using the word in a sentence.

As can be seen, vocabulary skills have been tapped into at various points already in the reading tasks. The goal in this portion of the assessment is to get a sense of familiarity with words in the medical and law enforcement contexts, two of the areas my work typically deals with. These words are not chosen for each client. They have been used with all clients (over 150) tested to date, giving me an overall sense of how a wide range of d/Deaf individuals will perform.

As mentioned earlier, vocabulary level and reading level are typically coupled. However, when working with adults, their work and life experiences can give them special pockets of familiarity with vocabulary that may not be expected in generalized test materials. In addition, as mentioned before, d/Deaf individuals have less access to incidental exposure to English in context than hearing individuals with the same reading levels because they cannot hear the language going on around them at all times.

A second function of this vocabulary task is to pick up on the extent to which an individual who thinks they know a word may actually be mistaken. Do clients know what they don't know? How reliable is their sense of understanding what they read?

IV.2.e.i. Twelfth Grade (grade-level reading list)

The test begins with a vetted list of 111 words at the twelfth-grade level. This is a list of words taken from lists developed for basal readers. I used it in a study with George

Miller on fourth-graders use of dictionaries that challenged the value of the exercise of looking up an unfamiliar word in a dictionary and using it in a sentence. For example, the child looks up the word *erode* and gets the definition "eats out, eats away," and then produces the sentence *My mother is a terrible cook so my family erodes a lot*.

The list of twelfth-grade words is designed to be unfamiliar to most clients or to have some words like *bid, shift,* or *degree* that have multiple senses only one or some of which are known. The primary purpose of the twelfth-grade list is to assure that clients do indicate words that are unfamiliar both here and later in the specialized vocabulary lists. In addition, false identifications reveal the extent to which a person can rely upon their sense of understanding of vocabulary. Poor readers and the those with the weakest vocabularies will often identify more of the 12th-grade words as familiar confusing *sinuous* with *sinus*, *accrue* with *accurate*, or *campaign* with *champagne* with much confidence. In the healthcare context the confuse *anemia* with *enema*, *living will* with *will live* or *starve* with *survive*.

The twelfth-grade word list appears below:

abduct	Caustic	degree
accrue	Cede	denote
adamant	Censure	despot
affiliate	Chaste	discreet
ally	citation	disdainful
amorphous	coerce	erode
Apathy	concomitant	expand
Askance	confidant	expedient
Aspersion	contrive	experiment
Astute	correlate	exude
Audacity	cultivate	facetious
augment	daze	fact
Bid	definition	fatigue
Campaign	defunct	felicity

figment	perfect	Scourge
finesse	persevere	Seal
foray	petulant	Senile
fusion	pilgrimage	Shift
gamut	pious	Sinuous
homogeneous	plurality	Skim
impervious	poignant	Sordid
impetuous	ponderous	Stature
infamy	precedent	Stoic
inordinate	preeminent	succulent
intrepid	Protract	Sully
levity	Recluse	tantamount
lucrative	Redress	tenacious
manner	Regale	Tenet
meticulous	Relegate	topography
mortal	Relevant	tractable
nebulous	reparation	transitory
nondescript	Replete	turgid
novice	Repudiate	unwitting
obviate	Reticence	usurp
opulent	Ribald	Vestige
overt	Sake	Volatile
panacea	Salient	Volition

Because the purpose of this vocabulary task is more familiarity of words in a given domain, the medical and law enforcement words are not from any vetted lists.

IV.2.e.ii. Medical and General Vocabulary

The following is the list of 97 items in the medical and general vocabulary list presented to clients. As with the twelfth-grade words they are asked to circle the ones they recognize and then we come back to the circled words later and they demonstrate familiarity. Some critical items are addressed even if uncircled including words like *consent* and *waiver.* Phrases like *change the dressings* are probed to see if there is actual understanding. Some clients will circle this phrase as familiar and then presented with the written discharge instruction: *You can go home from the hospital today but don't change the dressings for three days* will understand it as "don't change your clothes for three days."

accordion	hepatitis	evaluate
closed	ailment	milk products
appendix	inform	admission to the hospital
thigh	athlete	hernia
accountant	attribute	malignancy
accurate	explain	referral to another physician
action	muscle	enema
actual	Antibiotic	assassination
acute	Nurse	separation
accommodate	anesthesia	anemia
advise	Risk	oxygen
attorney	Refer	subscription
consent	Postpone	prescription
cancellation	Schedule	cafeteria
caffeine	interpreter	disability
fluids	translator	employment
incision	Signer	doctor
incident	refuse	operation
diabetes	confer	perforation

infection	acidity	starve
colon	diet	passed away
urination	mechanical diet	insurance
transportation	strenuous activity	infection
transfer	modified program of activity	inflammation
living will	appointment	medication
sedation	follow up	coronary
dehydration	waiver	defibrillator
dangers	hospital administrator	heart attack
oozing	survive	pulmonary
discoloration	deceased	pneumonia
discomfort	beneficiary	high blood pressure
wound	release	insufficiency
change the dressings	dead	

IV.2.e.iii. Law Enforcement Related Vocabulary

Below are the words from the law enforcement list. The procedure is the same as discussed above. In this case, one phrase consistently probed further is *other party.* The client is told that a police officer goes up to a car having clearly been in an accident and writes the following question: *I see you have been in an accident. Where is the other party?* The goal of probing is to see if they can get the meaning "other person(s) involved."

Officer	Fault	ticket
Accident	Violation	police report
License	altercation	license and registration
Registration	respect	address
Insurance	citation	contact

insurance holder	other party	medical
previous violations	Court	intoxicated
motor vehicle	Speedometer	disoriented
squad car	Alcohol	resist
arrest	D.W.I.	headquarters
dismissed	D.U.I	incarcerate
Precinct	under the influence	detain
Police	Establish	innocent
Regulation	Patrol	responsible
Incident	accident scene	will be held against you
take into custody	accident report	revoked
Miranda	Signature	remain silent
Rights	Released	destination
Attorney	Assaulted	consent
Counsel	simple assault	waive
Signer	evidence	liability
hearing impaired	arraignment	injury
Identification	psychiatric	strike
driver's license	evaluation	refrain from
operating a motor vehicle	psychological	Retain

V. Narrative Production (ASL v. English written v. English spoken)

The last component of my evaluation is done to compare how comfortable and how prolific a client will be expressing the same information in ASL, written English, and

spoken English. The material elicited here is also used in the ASL assessment, English writing assessment, including the argument structure studies, and the assessment of spoken English. It also has the benefit of offering a concise set of data that can be used for examples of the client's use of ASL signing, English writing, and speech.

The data in this task are elicited using two 1.5 minute nonverbal cartoons: *Mr. Koumal Flies like a Bird* and *Mr. Koumal Battles his Conscience*. These two cartoons were chosen from among about 100 different cartoons in the series because of their ability to elicit specific aspects of ASL grammar including classifiers and verbs of motion and location, verb agreement, spatial agreement, quantification, aspectual morphology (temporal and distributional) and role shift.

The Koumal cartoons (of which there are many) have a history of use as stimuli for the study of the writing of Deaf students. The National Technical Institute for the Deaf started using them in 1972 to elicit one component of a communication profile for entering college students.

Johnson, D.D. (1975) "Communication Characteristics of NTID Students. "In *Journal of the Academy of Rehabilitative Audiology*, vol. 8, pp. 17-32.

Crandall, C. (1975) "Assessment of Reading and Writing Skills in an Adult Deaf Population." In *Journal of the Academy of Rehabilitative Audiology*, vol. 8, pp. 64-69.

Johnson, D. and Kadunc, N. (1980). "Usefulness of the NTID Communication Profile for evaluating Deaf Secondary-level Students." American Annals of the Deaf, vol. 125, no. 3, pp. 337-349.

In 1975 Betsy MacDonald and Joan Forman, both at NTID, began using the Koumal cartoons to elicit linguistic data on ASL. It was their work that led me to use these materials. NTID stopped using the Koumal cartoons in the early 2000s.

V.1 Narrative Signed in ASL

To assess ASL narrative production, the client is asked to watch two 1.5 minute non-verbal cartoons (as many times as necessary) and to recount the story in ASL.

Studio Animovaného Filmu. 1969. *Mr. Koumal Flies like a Bird*. Bratri v Triku, Prague.

Studio Animovaného Filmu. 1971. *Mr. Koumal Battles his Conscience.* Bratriv Triku, Prague.

Versions of these same cartoon recountings are also collected in spoken and written English, allowing for comparison in terms of fluency across English and ASL. The results of this narrative production task were complemented by reviewing the client's ASL production in the background questioning and conversation. The basic content of each cartoon appears in the double-lined boxes below:

Mr. Koumal Flies Like a Bird is about a man who climbs a mountain with a pick-axe, and seeing a bird flying about, decides he wants to do the same thing. He tries to fly and fails. The bird sees him and laughs, causing some feathers to fall off. Mr. Koumal puts them on his arms, tries again, and fails. The bird, laughing even harder, loses all its feathers. Koumal gathers them up and puts even more on, tries, and again fails, falling into a chicken coop. At night takes feathers from all the birds in the coop, which he leaves completely naked looking up at him, puts them all over his body, creating heavy, elaborate wings, and tries again. He swoops a few times and crashes into the side of the mountain, which collapses upon him. As he crawls out of the rubble, he gets an idea. He decides to use the feathers to make Indian headdresses and sell them to children for money.

Mr. Koumal Battles his Conscience Mr. Koumal is standing outside of a restaurant and sees a beggar. He feels generous and drops a coin into the beggar's hat. A rich woman comes up and does the same, but in so doing, a large bundle of money falls unnoticed from her purse. Mr. Koumal sees it fall and battles with himself (in the form of a devil and angel taking control of him) over whether to take the money and have cars, riches, and world travel; or to return the money and be hugged by St. Peter as he enters the gates of heaven. While his good and evil side battle things out, the beggar sneaks in and steals the money. In the end, Mr. Koumal stands outside the restaurant with his pockets empty and his hand

extended. The beggar drives by in a huge car and tosses him a coin, which lands in the palm of his hand.

The client's signed rendition of the non-verbal cartoon can be seen on the video accompanying the assessment. A gloss does not do justice to the ASL sentences produced because much of the spatial grammar and non-manuals that form the basis for my evaluation were not transcribed. They are accessible via the raw data, which have been provided.

V.2. Narratives Written in English

The client is also asked to write a version of the cartoon in English. This written narrative is transcribed and analyzed for argument structure distribution, ASL grammatical features, content and fluency.

V.3. Narratives Spoken in English

The spoken version of the same cartoon was also collected. It is best viewed on the accompanying videotape. I also transcribe what I can understand of the speech using additional cues from both lipreading and, when present, concurrent signing. This represents the best comprehension possible utilizing visual input for both lipreading and concurrent signing.

V.4. The influence of English on ASL and vice versa

Using the material elicited as a whole as well as the Koumal narratives, I examine the extent to which the client's English narratives show influence from ASL as well as whether the ASL narrative shows influence from English. Because of the emphasis on English in a school environment, testing can sometimes influence the signer to use school signs or attempt to use more English-like constructions. Most clients are most at ease and least "test aware" when signing the Koumal narratives, so their ASL is more natural.

V.5. Comparison of narrative production in English versus ASL

Clients generally have some fluency in both English and ASL. As a final activity, I compare the Koumal narratives produced in ASL, written English and spoken English on the basis of comfort, fluency, intelligibility, and grammatical accuracy. In addition, I note how prolific they are in each mode. This gives a sense of what language and communication mode is best suited to the client.

Individual Assessment: Priscilla Saunders

I. Linguistic/Cultural Profile

1. **Responses:**
   a. **Prelingually deaf?** Yes. Born Deaf,

   b. **Deaf parents?** Parents were Deaf, 3 siblings are Deaf; and her children are all Deaf. She is a fifth generation signer. The language at home was ASL.

   c. **Attended residential school for the Deaf?** Yes. Both pre-school and kindergarten in schools with a Deaf program in Chico, CA. Freemont school for the Deaf for first and second grade; Arizona School for the Deaf third to seventh grade; spent eighth grade in a mainstream public school with an interpreter (a Coda who was a good match) but didn't like accessing her education through an interpreter; moved to MN for high school and attended the Minnesota State Academy for the Deaf (MSAD) for ninth and tenth grade; then moved to the Wisconsin School for the Deaf for eleventh and twelfth grade. After graduating, she immediately went to Gallaudet after graduation but left after two and a half years because of illness and the pregnancy with her first son. She did not return.

   d. **Tends to associate primarily with Deaf people**? Yes. 100% of the people she socializes with are Deaf. She only interacts with hearing people in stores, offices, etc.

   e. **Is a member of Deaf club**? Yes. In school she was a member of Jr. NAD and the Youth Leadership Club (YLC). She currently attends the Faribault Deaf club roughly every other month; regularly goes to Deaf events.

   f. **Married a Deaf spouse**? Yes. Her first husband was Deaf. He is the father of her oldest child (13), who is also Deaf. Her current partner of five years, Mr. Branden is Deaf and they have known each other for many years.

g. **Traditional Deaf occupation**? The only work experience she had had was as a baby sitter for both hearing and Deaf children. Although being a housewife in a completely Deaf family counts. No. She characterizes herself as "fully Deaf."

h. **Awareness of db loss?** No, she just characterizes herself as "fully Deaf."

2. **Early Life Choices:** All of her early life choices, made for her by her culturally Deaf parents, are indicative of identification with Deaf culture: born Deaf to fourth generation Deaf Parents, and residential schools or school with a Deaf program.

3. **Later Life Choices:** All her later life choices are indicative of an identification with Deaf culture: residential Deaf high school, Gallaudet University for college, socializing only with Deaf people, being married to a Deaf spouse or currently having a Deaf partner.

Ms. Saunders doesn't just satisfy all the criteria predictive of a person who is culturally Deaf and would use ASL as their primary and preferred language. She defines the case. This is a fifth-generation, native signer raised in an ASL-signing, fully Deaf household from birth. There is no question that this is a person whose first and primary language is ASL.

II. Individual's use of Interpreters

Ms. Saunders prefers to access information directly from ASL signers. She tried a year in a mainstream school with an interpreter who was native in ASL herself, but still preferred to access her education directly. She requests interpreters for all important venues where communication with non ASL-signers will occur. She is a savvy consumer who can articulate her language needs. As a native signer herself, she is best served by native-level target language interpretation into ASL by interpreters who can also understand and adequately convey her content, affect, and register in ASL into message equivalent and affect and register equivalent English.

III. American Sign Language Proficiency

1. **ASL Production (Grammar)** Native ASL Proficiency.

   a. **Verbs of Location (Bowerman Task)** Native ASL. Consistent Ground before Figure Ordering. Appropriate classifier choices throughout.

   b. **Verbs of Motion (VMPA, Supalla and Newport)** Native ASL. Native ASL. Consistent Ground before Figure Ordering. Appropriate classifier choices throughout.

2. **ASL Comprehension** Native level comprehension of ASL.

a. **Background Conversation** Her understanding of ASL throughout the background conversation was stellar. The only times she would get confused or ask for clarification was when I shifted my signing into more PSE or Manually Coded English.

b. ***Bird of a Different Feather* (Bahan)** Complete understanding as well as recognition that the story was an allegory paralleling the experience of a deaf child in a hearing family. She picked up on all the cultural references and laughed as appropriate. For example, when reference was made to the A.G. Beak Society she immediately got the play on words relating to the Alexander Graham Bell Society (an organization for oralists). She quickly recognized that the surgery to repair the birds beak was alluding to cochlear implants to repair hearing.

c. ***DWI* by David Rivera** Complete understanding of this classifier story designed to use nothing but the classifier and spatial verb system in ASL. Her ease of understanding demonstrates native level comprehension. This story speaks to the importance of medical interpreters using the classifier and spatial verb system in ASL to convey medical information.

3. **BICS vs. CALP**

a. **Basic Interpersonal Communication Skills.** Complete mastery of BICS in ASL.

b. **Cognitive Academic Language Proficiency.** Also, complete mastery of CALP in ASL. This is a signer who can talk about any topic and convey and receive the most complex of information in ASL.

IV. English Proficiency

1. **Spoken English Competency**

a. **Speech** She cannot use speech to communicate, even for the most basic purposes.

i. **Speech Quality.** Poor. Her speech lacks amplitude and is practically non-existent. It is extremely effortful. It took a good 5 minutes to convince her to even try to speak. She commented that I was the first person to get her to do it. When pronounced, words tend to be the onset and nucleus of the syllable with the offset omitted. There was no evidence of consonant clusters.

ii. **Intelligibility**

1. **Auditory monitoring alone.** Completely unintelligible.

2. **Lip reading and auditory monitoring.** She signs concurrently, which is where all the grammar lies. Speech-wise, she only produces individual words without any prosody. I could lip read the beginnings of a few words and could recognize a target seeing the sign, but the signs were content words sprinkled though a signed narrative.

b. **Lipreading.** Her lipreading is poor.

i. **Words** 29% Of the 17 words she got *animal*, *himself*, *form*, *grief*, and *tough* for *toughen*. The first three even poor lip readers seem to get. Her responses consistently show that she was trying to pick up on phonetic cues. For example, she got the /pl/ in *split* and guessed *plane*. She got the voiceless affricate /š/and the high vowel /I/ in *chin* and guessed *she*.

ii. **Sentences and Phrases** 32% She did minimally better given longer utterances with a little context, but actually the sentences and phrases that she got were highly routinized utterances like, ironically, *Do you understand me?; What's your telephone number?; How old is your son?;* or highly expected sentences like *How old is your son?* or *What time did you show up for work this morning?* She also recognized numbers but needed context. For example, she caught the number *seven,* needed a carrier phrase to get the others, e.g., "the number" *42*; "the year" *1996*. Numbers tend to be lipread easily.

c. **Impact on communication** She was very resistant to using speech and her embarrassment was evident. Her lipreading is poor. Her inability to catch words and phrases as well as getting only a word here and there in a sentence or misunderstanding would quickly lead to frustration except in contexts of high expectation. She couldn't make an appointment and get the date but she might be able to check in at a hotel where she knew that they would ask for name, address, credit card, etc. Attempts to communicate through lipreading and speech would juvenilize her in the minds of her interlocutors, or even worse. She would not present as the competent, articulate and mature adult she is.

2. Written English Competency

1. Argument Structure Distribution: Data Collection

Combined Movie and Cartoon recountings: 217 verbs; external arguments 52%; non-copular unaccusative 35%; copular 13%. Based upon the Movies and Cartoons combined, she patterns with the Deaf ASL signers writing English as well as the deaf writers of English in general, with slightly more copulars. This is likely an effect of the captioning, especially considering the discrepancy between the copulars in the cartoons vs. the movies.

i. Movie Recountings She recounted three movies *The Notebook*, *Titanic*, and *Moonstruck*. 144 verbs; external arguments 50%; non-copular unaccusative 33%; copular 17%. Based upon the movies, she patterns with the Deaf ASL signers writing English. She has more copulars than typical of deaf writers in general, but less than hearing English speakers. This is likely an effect of the captioning.

ii. Nonverbal Cartoons She recounted *Mr. Koumal Flies Like a Bird* and *Mr. Koumal Battles his Conscience.* 73 verbs; external arguments 56%; non-copular unaccusative 38%; copular 5%. Based upon the Koumals, she patterns with the Deaf ASL signers writing English.

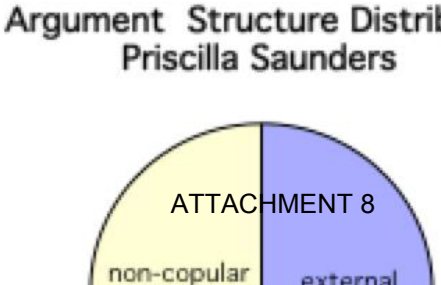
b. Argument Structure Distribution: Data Analysis

i. **Group 1: typical hearing speakers of English** Does not fit this distribution

ii. **Group 2: speakers with agrammatism producing English.** No evidence of agrammatism in any of the narratives.

iii. **Group 3: Deaf ASL signers writing English** Koumals pattern with this group. Movie recounting and movies combined with the Koumals fit strongly with the pattern for Deaf ASL signers writing English.

iv. **Group 4: non-signing deaf individuals writing English** Koumals pattern with Deaf writers of English in general. The movies also have a reduced number of copular constructions but they are more frequent than in the Koumals. This could be an effect of the captioning, but she still patterns with d/Deaf writers.



Compare to charts in section III.4.b.

c. Specifics of English grammar production. Most of the examples I cite here can be seen in the Koumal narratives presented in section V.

i. Lexical. She had words like *panhandling, homeless, obviously, temptation* and most words used were used correctly, although she did substitute *scrambled* for *tumbled (he fell and scrambled all the way down)*, *breathe* for *breath*, and *shattered* for *crumbled; rock* for *mountain, headbands* for *headdresses.*

ii. Morphological. She did have problems with the use of prepositions (misuses and omissions; *He decided to make feathers* [Øinto] *headbands*), determiners; (omissions) tense marking (omission or incorrect form: he stopped for a breathe, then proceedØ to the top, *shedded* for *she, he knew the money isn't his*), number agreement: *There were a farm of chickens.*

iii. Syntactic. She did use passive voice: He will be forgiven by "St. Peter" up there. She also consistently used subject pronouns rather than dropping them as they would be in ASL. She did however omit object pronouns:the man gathered the feathers, put (Øthem) on him and went (Øto the) top again.

iv. **Semantic** No semantic errors.

Her English isn't native, but it is functional. It is clearly her second language. While there were a lot of grammatical errors, her recounting was understandable.

d. **Reading**

Ms. Saunders reading is a bit mixed. She tends to skim over details, which is why I suspect she had a superficial reading of the adolescence passage, which was 5.5 (halfway through fifth grade). She did well with the seventh-grade reading passage from the Flynt Cooter, but this was a familiar topic. She did not read reliably at the 8th grade level and struggled unsuccessfully at the ninth-grade level. Sheerly on the basis of vocabulary in the San Diego Screening, she fell at the sixth-grade level and had many gaps in her seventh-grade vocabulary. Based upon these three probes in conjunction, I would place her at the sixth-grade level in reading with potential to read higher when the subject matter is familiar.

i. **Fifth and Twelfth Grade Reading Screening:**

Fifth grade (5.5) Adolescence. She didn't circle any of the words and thought that she had read the passage fully. However, she only got the idea that the discussion was about old people as opposed to young people and had no idea that it addressed puberty.

Twelfth Grade 12.0 Stages of Written Language Development. She wasn't able to read enough of the second passage to be able to get the gist of it. The only words circled were: *empirical* and *quantitative*.

ii. Flynt-Cooter Reading Inventory

Based upon her performance on the sentences in the Flynt Cooter Inventory, I should have started her at the seventh-grade level. However, I was curious to see what she could do at Level 8. She had corrected herself on the error where she misunderstood ascending to mean descending, but she also seems to avoid the concept of rigorous. Her behavior reading the eighth-grade passage was similar. She was fluid but sketchy on the details. I moved up to the ninth-grade level to get a ceiling on her skills. She had many problems with vocabulary and struggled reading at this level. I then moved down to the seventh-grade level where she read very solidly and was in control of the vocabulary. I suspect this was because this

subject matter was familiar. In reading the sentences, she seemed to understand them, but her signing of their meaning was awkward.

iii. **San Diego Screening** Reads independently at the sixth-grade level. Reads with frustration at the seventh-grade level

iv. **Reading behaviors** She likes to read and make a practice of reading for a half hour everyday. She reads the newspaper, *People* magazine, and parenting magazines.

e. **Vocabulary**

i. **Twelfth Grade (grade-level reading list)**

38 of the 111 twelfth-grade words recognized; of these 38, 10 were false recognitions (e.g., *disappointed* for *disdainful*, *fitness* for *finesse*, *ludicrous* for *lucrative*, *suspicious* for *meticulous*, *preserve* for *persevere*, *president* for *precedent.* This means that at the twelfth-grade level, 26% of the time she thought she knew a word, she was mistaken. However, she didsuccessfully recognize 33% of the twelfth-grade words.

ii. **Medical and General Vocabulary**

She recognized all 97 of the medical and general vocabulary, but 7 of these were false recognitions: *massive* for *malignancy*, *swollen* for *perforation*, *will and testament* for *living will*, *executor* for *beneficiary*. She correctly recognized 93% of the words in the medical and general vocabulary. Her false recognition rate drops to only 7% in this domain.

iii. Law Enforcement Related Vocabulary

She also recognized all 75 of the law enforcement vocabulary and falsely identified only 1: *obtain* for *detain*. Her false identification rate here was only 1%.

V. Narrative Production (ASL v. English written v. English spoken)

1. Narratives signed in ASL

Ms. Saunders Koumal narratives signed in ASL are available on the accompanying video files. Needless to say, her signing is natively fluent and grammatical ASL with a strong use of classifiers, motion/location verbs, role shift, and facial grammar. It is not only completely understandable. It is articulate, efficient, and uses the grammar of ASL to provide a strong visual image of the events signed.

2. Narratives written in English

Below are Ms. Saunders renditions of the same cartoons rendered in written English.

Mr. Koumal Flies Like a Bird *(written)* **Priscilla Saunders**

a man climbed up on a rock, by halfway, he stopped for a breathe, then proceed to the top. Beaming with pride he had made it! All of a sudden he saw a gold bird flying, he jumped off the rock thinking he could fly. Instead of flying, he fell and scrambled all way down. The gold bird laughed at the man and shedded few feathers. The man thought of putting feathers on his arms and went back top of the rock and tried to fly again. Instead, he fell again! The bird laughed hystercially that all feathers literally fell off! The man gathered the feathers, put on him and went top again. Unfortunately, he failed his attempt to fly. There were a farm of chickens nearby, at night, he went there and stole their feathers. He attempted to put all feathers on him and went back top to try fly again. He was only successful for a bit but glided onto the rock and it shattered down onto him!
He decided to make feathers headbands and traded them for eggs with Indian people. :)

Mr. Koumal Battles his Conscience **Priscilla Saunders**

a man obivously poor, stood front of restaurant reached inside his pocket and found only one penny. He saw a homeless man sitting, panhandling for money (help). He decided to give his penny to him. Beside them, a rich lady with a fur around her neck and she gave the homeless man a shiny coin. While she was giving the coin, a bundle of cash fell out of her purse. The poor man saw it and he began to imagine himself being rich, living in a mansion, travel the world... temptation took over. But he knew the money isnt his. So good thoughts came up and if he returned the cash to its rightful owner, he will be forgiven by "St. Peter" up there. But yet, he still struggled with keeping the cash. While he and temptation fought, the homeless man eventually sneaked in and stole it. He drove by with a fancy car and gave the poor man a penny.

Ms. Saunders' written English narratives are understandable and cover all the elements of the story, but are clearly not native. She effectively sprinkles in some canned phrases like *beaming with pride* and *returned the cash to its rightful owner*. Nonetheless, she makes many of the grammatical errors typical of second language learners. The grammatical errors mentioned in section IV.1.f. are available in context here. There are errors in punctuation as well. Nonetheless, her English is above the fourth-grade average noted among d/Deaf writers of English. Like many native signers from Deaf families who have been exposed to a first language from birth, her second language, English, is good and her reading is adequate for most everyday purposes.

3. **Narratives spoken in English**
   Ms. Saunders does not speak. It was a struggle to even get her to provide a sample. When she did, the speech lacked phonation and was unintelligible. In addition, her discomfort and embarrassment was evident.

Mr. Koumal Flies like a Bird (Spoken)	**Priscilla Saunders**
Man up rock saw bird. Ø Want fly. Ø Try, Ø fall. Bird laugh. Feather fall fall. [Gives up]	

4. **The influence of English on ASL and vice versa**
   There is little influence of English on Ms. Saunders' ASL. However, there is evidence of some ASL influence on her English. Some of the influences are subtle, like the little instances of added attention to spatial and descriptive detail: *Beside them, a rich lady with a fur around her neck and she gave the homeless man a shiny coin.* Examples like this also reflect the narrative style of setting up and describing topics in ASL. One ASL feature in her English is the omission of the auxiliary verb *to be*: *Beside them,* (Øwas) *a rich lady with a fur around her neck and she gave the homeless man a shiny coin.* Another is the omission of object pronouns when previously stated in the discourse: The man gathered the feathers, put Ø on him and went (Øto the) top again. The omission of the *to* in this sentence is also an influence from ASL where there are no prepositions. They are incorporated into the verb.

   It may also be noticeable to the native English reader that Ms. Saunders is using a particular unaccusative construction with a frequency more typical of ASL: *a bundle of cash fell out of her purse*, *temptation took over, good thoughts came up*.

   However, it should be noted that she does seem to have the grammars of English and ASL separate. She uses the obligatory subject pronouns required in English grammar and systematically omits them in her signed narrative, following the rules of ASL grammar.

5. **Comparison of narrative production in English and ASL**
   In comparing the Koumal narratives in ASL and English. It is clear that Ms. Saunders is most comfortable with ASL. She is most prolific in ASL and produces an articulate and grammatical narrative. She is also comfortable writing in English, although it is clearly not her first language. She is not hindered from covering the content of the cartoons when writing, but the text she produced was riddled with grammar errors. Her production of spoken English is strained, lacks phonation and is so effortful that only a handful of words are produced. When speech is the modality, content and detail are sacrificed.

Summary

In summary, Ms. Saunders is a culturally Deaf, natively fluent signer of ASL. She has mastery of the most sophisticated aspects of ASL grammar, being particularly adept at using the ground before figure ordering, classifiers, spatial verbs, and facial grammar that are very different from English grammar. She has not only Basic Interpersonal Communication Skills. She can also use her ASL in cognitively demanding situations that are not just social. She has metalinguistic awareness of her ASL and can discuss grammar with ease.

In contrast, her speech is unintelligible and her lipreading functions for only the most routine and highly expected information, however her reading and writing of English are somewhat above average for the d/Deaf population. However, she by no means exhibits native-like fluency. She is clearly recognizable as a second language learner.

Her vocabulary is strong in domains that she needs to know about like medical and law enforcement terms. In fact, she is one of those individuals for whom vocabulary and reading level appear to be decoupled. Her vocabulary level is higher than her reading level, and at times when the vocabulary is familiar it can bring her reading level up. This would account for her problems reading the fifth-grade passage on adolescence, but her ability to read solidly at the seventh-grade level in the Flynt Cooter passages when the vocabulary is familiar.

While her ASL is sufficient to allow her to learn the meaning of medical terminology, her English is not. Fingerspelling new medical terms or explaining new concepts in English or forms of signing that are English based will not serve her needs. Expression of these concepts in ASL terms, on the other hand, makes them accessible and therefore learnable.

Ms. Saunders can express herself and understand others best through ASL. She has cognitive academic proficiency in ASL, much less so in English, which is why she prefers learning in an ASL rich environment. To express herself adequately and to be recognized as the bright, competent, and mature woman that she is she must be able to speak directly to people in ASL or have an interpreter that can provide her a highly sophisticated interpretation from English and have the Cognitive Academic Proficiency in ASL and command of register and affect to do her justice in interpreting her signing.

In addition to not preferring English as her input, working from an English text, as in reading and trying to move between that input and ASL output is very difficult for her. She has a very hard time moving from ASL to English and back. English input seems to stunt her language processing in ASL, which may be part of the reason she has been so insistent on getting consistent and fluent ASL input.

Individual Assessment: Jason Branden

I. Linguistic/Cultural Profile

1. Responses:

a. **Prelingually deaf?** Yes. His deafness was discovered at age two. But this is pretty typical in the case of children born deaf. In either case, he is prelingually deaf.

b. **Deaf parents?** Yes, sort of. His mother is deaf and he has a Deaf brother two years younger. His father is hearing and doesn't sign. Two siblings are hearing. His mother was proud of her oral skills and spoke at home although she did use some home gestures with Jason.

c. **Attended residential school for the Deaf?** Yes, later. He went for pre-school through second grade to the Wheaton School as the only deaf student with an interpreter. After second grade he moved to Bagley and went to a mainstream school with a deaf program until sophomore year in high school with about 20 deaf students in different grades. Then transferred to MSAD (Minn State Academy for the Deaf) until he graduated in 1994. Went to Gallaudet and left in his junior year. Did the prep program. Went to Gallaudet more for the social interaction than the academics.

d. **Tends to associate primarily with Deaf people**? Yes. Most of his friends are deaf. He has 3-4 hearing friends with good signing skills.

e. **Is a member of Deaf club**? Yes. He is a football coach at MSAD FTC Football Deaf Club; member of Deaf Disk Gold club; member MSAD alumni association. Faribault Deaf Club; Thompson Hall. Attends Deaf Expo, deaf awareness day, etc.

f. **Married a Deaf spouse**? Yes. Never married. Has dated both Deaf and hearing women. Has been with Priscilla for five years and has two children with her.

g. **Traditional Deaf occupation**? Yes. Went back to northern Minnesota for a summer after leaving Gallaudet and then got a job in the Twin Cities. Became a teaching assistant for Deaf students with Emotional and Behavioral Disabilities in Plymouth. District 27. Worked there for 6 months and moved to another job focused on living skills--job coach, teaching assistant, aid in a classroom. He moved over to working for a construction company for five years. Actually worked in one setting for a week when they discovered he was more comfortable working with a Deaf mentor and switch him to that job. He was laid off because available construction work declined. So, he went to work for a printing company that made magazines and catalogs and worked in the bindery. He was the only Deaf employee in printing company (1.5 years). He went to MSAD to work in the dorm. This will be his sixth year there.

h. **Awareness of db loss?** Yes. He reports having a 90-95 db loss. He had hearing aids but lost them two years ago and cannot afford to replace them. They help with speech, especially amplitude control.

2. **Early Life Choices:** Despite the fact that he has a deaf mother, Mr. Branden's early life choices were a bit mixed, because his mother wanted to raise him with a more oral philosophy that put an emphasis on speech. His early schooling was either with an interpreter or in a mainstream school with a Deaf program. He didn't attend a residential school until he was a sophomore. Nonetheless, despite being mixed his early experiences still suggest a Deaf identity.

3. **Later Life Choices:** Once decisions were under his control, Mr. Branden shows clear indications of a Deaf identity. He graduated from MSAD and attended Gallaudet. Most of his friends are Deaf. He is a member of Deaf clubs and coaches Deaf football. He has a long term relationship and two children with a Deaf partner. And his jobs have all been traditional Deaf occupations.

He does know his db loss, but this makes sense given his mother's oral philosophy and the fact that he wears hearing aids.

II. **Individual's use of Interpreters.** Mr. Branden uses interpreters on a regular basis with discretion as to when they are needed. He prefers ASL but has a bit more leeway than Ms. Saunders in accepting interpreting that leans toward PSE.

III. American Sign Language Proficiency

1. **ASL Production (Grammar)**

   a. **Verbs of Location (Bowerman Task)** He predominantly used a Ground before Figure ordering, but slipped into more English ordering once in a while. Appropriate classifier choice except for one time where an odd classifier, perhaps dialectal was used. When I asked he noted that it was just an articulation error.

   b. **Verbs of Motion (VMPA, Supalla and Newport)** His use of Ground before Figure order was very consistent and classifier choices were appropriate.

2. **ASL Comprehension**

a. **Background Conversation** Comprehension throughout the background conversation was excellent. He was even receptive to changes in signing that were a bit more English based. Still preference for ASL was clear.

b. ***Bird of a Different Feather* (Bahan)** He understood the story easily and immediately picked up on the fact that it was really talking about the deaf experience. He made the connection with the cochlear implant.

c. ***DWI* by David Rivera** No problems understanding Rivera's classifier story.

3. BICS vs. CALP

a. **Basic Interpersonal Communication Skills** Throughout the background testing he demonstrated mastery of BICS.

b. **Cognitive Academic Language Proficiency** He demonstrated a bit less of a register range than Priscilla, but clearly had the level of language and abstraction characteristic of CALP.

IV. English Proficiency

1. Spoken English Competency

a. **Speech**
Because his speech is so prolific a transcription of just one of the narratives is sufficient for discussion of the characteristics of his speech.
The transcription of Mr. Branden's spoken language rendition from which these examples are drawn appears in Section V.1.3.

i. **Speech Quality.**
Mr. Branden's speech is what is best termed Deaf speech with the specific characteristics discussed below. Much of his intended speech targets are recognizable if one looks at him, has accompanying gestures and a shared context. These, by the way, are all the conditions typical of Basic Interpersonal Communication (more social communication used in high context situations among people that know each and share the background.) In such contexts and under such conditions, his speech is deceptively understandable, but still maybe 60% of the time.

1. **Intonation and prosody** are a bit exaggerated, but clear.

2. **Syllable integrity: S**yllables are sometimes merged but not invariably, overall they tend to be discriminable; there is often

a final reduced syllable that aids in production of a final consonant.

3. **Dipthongs:** [oy], [aU], are recognizable

4. Vowels: [iy], [ɛ], [ʌ], [I], [a], [ey], [ə], [ay], etc. are recognizable

5. **Consonant clusters (onset):** sCC-initial /s/ in complex onsets is aspirated rather than sibilant (e.g. /^{h}pik^{h}/ for *speak*)

6. **Liquids:** The /ɻ/ and /l/ sounds have a juvenile quality to them that is rounded and the color the vowel from being a rhoticized (r-colored) central vowel /ɝ/ to being more of a high rounded back vowel for the /r/ and a mid rounded lax vowel [ɔ] before an /l/. (e.g., [bUwd] for *bird* and [fɔw] or [fɔ-wə] for *fall*.

7. **Consonant clusters (offset):** in coronal final clusters like /nt/ the final consonant tends to be dropped (e.g., /wɛn/ for *went*)

8. **Final consonants**: often have aspiration rather than unreleased (e.g. [^{h}pik^{h}] for *speak*); sometimes voiced and followed by a reduced vowel (e.g., [^{h}ta:bə] for *stop*; and at times [ʌp^{h}ə] for *up;* an extra final reduced vowel is particularly salient following a final nasal (e.g., /wIŋ-gʌ/ for *wing*).

9. **Amplitude**: Tends to be a bit loud but is sufficient.

ii. Intelligibility

1. **Auditory monitoring alone.** On the basis of speech mechanics, Mr. Branden's articulation is above the average. His vowels are distinguishable from one another, especially in stressed words. His intonation for things like questions is clear. While consonant clusters are reduced and final consonants are deleted or supported by an extra syllable, it seemed when transcribing him that his monitoring his speech without seeing him would be moderately doable. Surprisingly, when auditorily monitoring Mr. Branden's speech it has a much lower intelligibility than would be expected listening and watching him. There are some sentences and phrases like *He made it!*; *He want to fly*; *Try again*; and *chicken farm* that are recognizable, but they are few and far between. With auditory monitoring alone, shared knowledge of

the content of the cartoon, and familiarity with deaf speech I could still understand him at best 30% of the time.

2. **Lipreading and auditory monitoring.** When lipreading and listening to him, and able to view his accompanying signing and gestures, I was able to transcribe about 85-90% of what he said. There were still unintelligible parts as well as pieces of the narrative that were not spoken.

Overall, with context and visual cues, Mr. Branden's actual speech is moderately intelligible, but it has an imprecise juvenile feel to it as well as the nasalization and imprecise contact articulation of deaf speech that has over time become less precise because of lack of auditory feedback that would allow him to continually correct his articulation.

The intelligibility of his speech, however, is also compromised by the fact that when speaking, his spoken English is predominantly being driven by ASL grammar, even more so than in his writing. Null subjects are typical, e.g., *He want get all the feathers. So boy went out the chicken farm. Ø grab all the feather possible—all chicken. Ø put Ø in the bag.* We also see in the previous example his characteristic omission of both prepositions and complementizers. Tense and number agreement are lacking, determiners are misused and frequently omitted. Auxiliaries are omitted. In addition, he doesn't seem to have English equivalents for classifier and motion/verb constructions prevalent in ASL. As a result, he typically omits an English form for this information completely and makes a sound like a Bronx cheer, a spoken version of some of the adverbial markers in ASL (e.g., bup), or his own idiosyncratic onomatopoeia (e.g., shoop) while signing the information he is trying to convey. This occurs for forms like "to fall continually and make a hard contact with a surface," "to glue narrow flat objects (feathers) along each of his arms," etc. This is a kind of borrowing of ASL into English that is frequently seen in the speech of children of Deaf parents. It seems that an ASL borrowing must con-occur with a sound of some sort. Borrowings tend not to be silent. For example, one might say, *I was on my way here and my car engine [tongue trill, while signing COLLAPSE]*, meaning "I was on my way driving here when my engine completely gave out." There are also ASL signed markers of grammatical constructions like direct quotation. For example, he say He laugh then breaks eye gaze, points to himself and shifts his body (characteristic of marking a

role shift in ASL) and then says ha ha. This is an indirect action construction possible in ASL but not allowed in English, where such quotations must be of speech not actions and needs to be preceded by a locution verb like *He said, "the quote."*

The combination of deaf speech, ASL grammar driving the syntax, borrowings from ASL that result in omission of any spoken equivalent other than a sound like a Bronx cheer/raspberry, vocalized ASL mouth adverb, or omonatopoeia makes his speech intelligible only in high context situations and only for more casual BICS-type (Basic Interpersonal Communication) communication than for more sophisticated CALP-type (Cognitive Academic Language) forms of communication that would be used in medical appointments where learning about procedures would be involved.

In my expert opinion, his speech while more intelligible than that of many deaf speakers, is not suitable for low context interactions where new information is being learned, questions are being asked and verification of understanding complex information via "teach back" dialogues that are now typically used in healthcare settings.

b. Lipreading

Overall, Mr. Branden's performance on the lipreading task was 72%. He lipread highly routinized words and phrases with ease and was also able to get much of the less expected material presented. His guesses, even when incorrect, show evidence of processing for phonetically related information, awareness of words that can be confused and what their alternatives are. He got every number which is characteristic of good lipreaders. He was even able to get a pretty close lipread on words that he didn't know, for example, *nodule* in *We found a nodule*. While not the tops attainable, I would rate him as a very good lipreader. With some repetition and clarification, he has the ability to lipread much of the vocabulary he knows. He definitely did have the ability to watch Ms. Saunders signing and at times monitor the speech of the interpreter, provided he had consecutive access or was monitoring already predicting Ms. Saunders' answers.

i. **Words** He got 71% if the words presented.

ii. **Sentences and Phrases** He got 72% of the words presented.

c. **Impact on communication** In a quiet room with at least two repetitions, Mr. Brandon lipreads well, although he does need to be careful to double-check his understanding. Often, his first guess was wrong. With repetition, he can rely upon lipreading for everyday expected communication and for some conversations beyond that. He is aware of when he is guessing and when he has solid recognition.

However, in two-way conversations, his speech will not allow him to be comprehended with ease. The ASL influence on his spoken language is great. Individuals who know ASL are more likely to understand him than others, but only with strong context and rechecking the message. It should also be noted that the English grammar issues, the intrusions from ASL, the dropping of English when borrowing from ASL all contribute to difficulty understanding his speech. In addition, the impreciseness of his articulation and the problems with his pronunciation of liquids all lead one to hear his speech as fairly juvenile. This would definitely give a very different impression of his maturity and competence to people interacting with him than would a solid interpretation of the high level of communication he exhibits in ASL.

It should also be noted that Mr. Branden took this test without a hearing aid. He lost his hearing aid two years ago and was unable to afford to replace it. He did have his aid when attending the prenatal and neurological visits in this case.

2. Written English Competency

a. Argument Structure Distribution: Data Collection

Movies and Cartoons Combined: 266 verbs: external arguments 55%; noncopular unaccusatives 36%; copulars 9% Based upon the movies and cartoons combines, he patterns with Deaf readers, and in particular Deaf ASL signers writing English.

i. Movie Recountings. He watched and wrote about the following three movies: *Shawshank Redemption*, *The Natural*, and *Overboard*. Because his writing is in general very prolific, I will be including all the movie renditions, but I have enough for the argument structure study with just one additional movie. Since the Shawshank Redemption is his favorite movie, I have coded that one for argument structure. All of them were examined for grammaticality. 222 verbs: external arguments 53%; noncopular unaccusatives 37%; copulars 10% . Based upon the Koumals, he patterns with Deaf readers, and in particular Deaf ASL signers writing English.

ii. Nonverbal Cartoons 87 verbs: external arguments 56%; noncopular unaccusatives 34%; copulars 9% . Based upon the Koumals, he patterns with Deaf readers, and in particular Deaf ASL signers writing English.

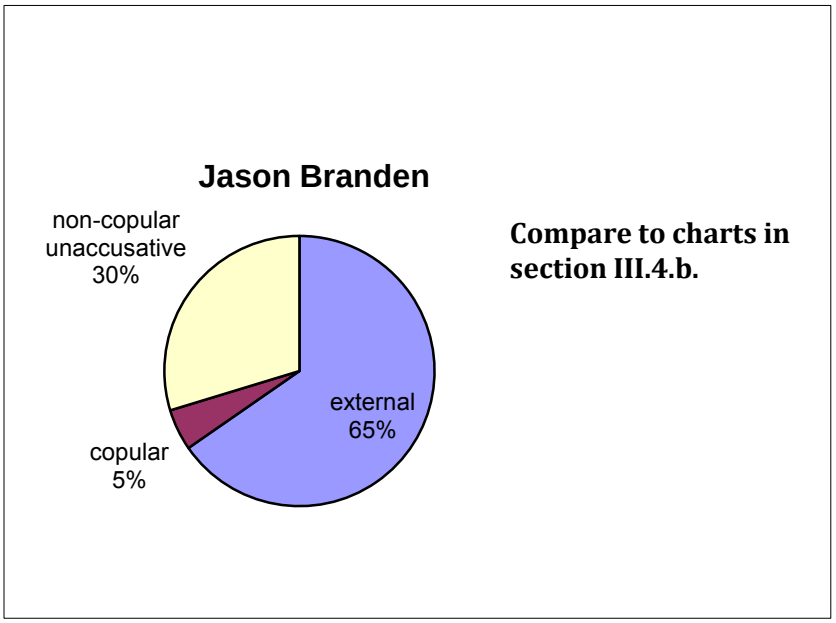
b. Argument Structure Distribution: Data Analysis

i. **Group 1: typical hearing speakers of English** Koumals do not pattern with this group, nor do the movies.

ii. Group 2: speakers with agrammatism producing English No evidence of agrammatism in either sets of narratives.

iii. **Group 3: Deaf ASL signers writing English** His Koumal narratives pattern with this group, as do the movies and the movies combined with the Koumals.

iv. **Group 4: non-signing deaf individuals writing English** His Koumal narratives pattern with this group as well as his movie data.



c. Specifics of English grammar production

i. Lexical There were several word choice errors, e.g. *stumbled* for *tumbled*; *visualized* for *imagined*; *whole* for *all*, etc.

ii. **Morphological** There were consistent errors in past tense marking; incorrect definiteness in determiners (typically definite for indefinite); missing determiners, prepositions, auxiliaries, and complementizers; errors in number agreement.

iii. **Syntactic.** There were missing complementizers, and cases of flipped arguments (e,g, The boy took the whole feathers and made them out of Indian hat. "The boy took all the feathers and made them into Indian headdresses."

iv. **Semantic.** The semantics seemed fine.

d. Reading

i. **Fifth and Twelfth Grade Reading Screening**
He was able to read and get the gist of the fifth-grade reading passage about *adolescence*. It wasn't perfect but he got the idea that the passage was about older adults vs. teenagers and related to puberty. He was unable to read the twelfth-grade passage, but only circled the words *empirical*, *quantitative* and *preclude* as unknown. However, probed he didn't get the actual meaning of *spare tire* or *yardstick.* Based upon this rough screening, his reading level is likely to be somewhere at or above the fifth-grade level but well below the twelfth-grade level.

ii. **Flynt-Cooter Reading Inventory**
Screening sentences grades 1-9: Mr. Branden read the Flynt Cooter reading sentences with ease up through the seventh grade. He got the passive reading of *I was pulled out of the hole* and the figurative reading of *The forest was something to see.* His ability to read the English sentences and then give a completely ASL interpretation of their meaning with no source language intrusions from English was impressive. His responses on the Flynt-Cooter actually supplement the other testing on ASL production. At the eighth-grade level, vocabulary took its toll. He didn't know the words *ascending, rigorous,* or *hazardous* and this blocked his ability to read the first sentence. He misunderstood the word incubation as "like a baby being placed in an incubator" in the third sentence. At the ninth-grade level, he was able to understand the first sentences, but the remaining sentences were not readable. He didn't know words

besieged, pasty and *complexion* and was unable to make even a guess at their meaning.

Graded Reading Passages: Based upon his performance on the screening sentences, Mr. Branden started with the seventh-grade passage, *The Canoe Trip*. As he read the passage to himself, he informed me that he didn't know the word *flint*. However, he was able to ascertain the correct meaning from the context. He read this passage with ease, and recounted it in beautifully rich ASL.

We moved on to the eighth-grade reading passage, *The Eagle*. He was unfamiliar with the word maize, as well as the three words he had struggled with before: *ascending, rigorous* and *hazardous*.

Based upon the Flynt Cooter, his reading level is at seventh-grade.

Notably, when working from English, Ms. Saunders has a hard time letting go of the English form and expressing her understanding in her most fluent ASL. There is a strong contrast here between Ms. Saunders' skills in this area and Mr. Branden's skills. Mr. Branden can flip easily from ASL to English and English to ASL; whereas Ms. Saunders seems to far less adept at taking in English input and then making the switch to discussing it in ASL. Her signing in this condition shows many source language intrusions. For example, while both Ms. Saunders and Mr. Branden understood the sixth-grade level sentence: *The conservationist hoped to reforest the mountain.* Mr. Brandon's interpretation of the sentence in ASL showed no influence from English; whereas Ms. Saunders' interpretation was almost a sign for word coding of the English sentence.

iii. San Diego Screening

On the San Diego screening, he was only able to read independently and without frustration up to the sixth-grade level. I suspect that his very successful reading at the seventh-grade level on the Flynt Cooter sentences was facilitated by his familiarity with the subject matter: canoeing and camping.

iv. Reading behaviors

Mr. Brandon reads silently to himself and remembers well what he reads. For the passages at his reading level, his recountings were accurate and detailed.

e. Vocabulary

i. **Twelfth Grade** (grade-level reading list) He recognized 46 (41%) of the 111 words at the twelfth-grade level. Of these, only 38 were recognized correctly. So of the words he recognized, 17% were falsely recognized.

ii. **Medical and General** He recognized 95 (98%) of the 97 words from medical and general vocabulary. In the medical and general vocabulary, he recognized all but two words: *accordion* and *perforation*. He was unsure of how some of the words fit into the medical domain (e.g., insufficiency). The vocabulary was not limited to medical however.

iii. **Law Enforcement Related Vocabulary.** He correctly recognized and 75 (100%) of the words from law enforcement vocabulary.

V. Narrative Production (ASL v. English written v. English spoken)

1. **Narrative signed in ASL** His ASL narrative demonstrated fluency and grammatical accuracy in ASL. He used a wide range of grammatical constructions from ASL, facial grammar, classifiers and spatial verbs, role shift and other typical features. He was comfortable and fluent in his signing.

2. **Narratives written in English** His written English narrative covered the content and was for the most part understandable. In contrast with his fluency and grammatical accuracy in ASL, the written English narratives were clearly that of a second language user. See the errors in IV.3.c

Mr. Koumal Flies like a Bird **Jason Branden**

The boy was hiking up the rocky hill. Halfway up the boy stopped and rest plus take a good view. Then he continue to hike all the way up to the top.
He looked around and saw gold bird. He tried to take closer look of gold bird but he stumbled down the hill to the bottom. The gold bird landed on the top of the hill and saw the boy stumbled to the bottom. The bird laughed and shed the feather each time the bird laughed.
The boy was at the bottom and shaking off from the fall. He visualized that he wants to fly. He saw the feathers flew by him. He glued the feather on his arms. He went up the hill again and tried to fly. But he stumbled down the hill as the bird landed on top of the hill and laughed so hard at the boy and at the same time shed whole feathers. The feathers landed on the bottom of the hill. The boy is so determined to fly. So he glued whole feathers to his arms and tried to fly

again. And still failed to fly again. So he went to chicken farm and get the all of the feathers from all of the chickens. He made wings and glued on whole body. He tried to fly off the hill. He went up in the air and then he flew into the hill. The hill crumbled to the ground.
The boy took the whole feathers and made them out of indian hat. The little boy traded the egg for the hat.

Mr. Koumal Battles his Conscience **Jason Branden**
Outside of restaurant there was a man standing looking around and noticed homeless man sitting down. That man reached in his pocket and took out the coin and gave it to the homeless man. Woman walking by and gave coin to homeless man.
While the woman gave the coin to the homeless man, there's big wad of cash fell out of purse. The man saw it and walk to the cash. He wasn't sure what to do about the cash.
The devil in the man came out of the man wanting to take the cash and run. He visualized wanting to be more rich and travel around the world.
The angel took over the man. He visualized that if he return the cash, he could waltz right into heaven. Soon as he was ready to return the cash, the devil took half of the man. Angel and the devil were fighting over the cash. Homeless man saw them fighting over the cash. He sneak by them and took the cash and run off. The angel and the devil become whole man. The man reached into his pocket and nothing comes out. The homeless man drove by with brand new car and stopped by that man. He tossed the coin to the man and drove off.

3. Narratives spoken in English

Below is a transcription of Mr. Branden's spoken rendition of *Mr. Koumal Flies like a Bird.* His actual spoken text for both the Koumal cartoons is available on the video file provided. Because his speech is so prolific a transcription of just one of the narratives is sufficient for discussion here.

Transcription of Mr. Koumal Flies like a Bird spoken **Jason Branden**
Speak? Okay, uh. Boy went up the hill, all the way up. He stopped look around the air/area, gets a smell, good view. The bird try continue hiking all the way up the hill, look around. He saw a gold bird. He tried get the close to the gold bird. He stumbled to the floo…all the way down to the bottom ground. Bird land on top hill, saw him stumble ground. He laugh, "Ha ha." Feathers shed off. Bird saw the feather brrr [like Bronx cheer]. Bird saw the feather, he want to fly! So, he grab a glue [signs PUT-ON-ALONG[CL:H+++]loc[arm], go all up on the hill again. Ø Try again. Bup [signs SBP-JUMP] brr[Bronx cheer while signing FALL+++] down to the bottom the ground! The bird lands [unintelligible] laugh so hard, Ø shed all the feather off. Bird [signs LOOK-AT[up to down]] [unintelligible] fell off. Bird

unintelligible unintelligible [concurrently signing UNDERSTAND DECIDE]. Try go back up and do it again! Ø put brr[Bronx cheer][signs PUT-ON-ALONG[CL:H+++]loc[arm]-left PUT-ON-ALONG[CL:H+++]loc[arm]-right] all glue all the way arm. Ø Go back up the hill try again. Bup [signs SBP-JUMP] brr[Bronx cheer while signing CL:1-GO[downward]+++]. Didn't make it. Boy [signs IX1p; role shift marker] want go up. Ø saw bird, chicken farm. He want get all the feathers. So boy went out the chicken farm. Ø grab all the feather possible—all chicken. Ø put Ø in the bag. [unintelligible] [concurrently signs HCL:grasp(2h)-ON[shoulder]. Ø put them all over him. Ø made wing. Ø go up the hill, Ø jump. He made up…he made it, but all sudden zhoop Ø crash into the hill. Hill just brr[Bronx cheer] fall to the ground….Oh, that's right. Boy [unintelligible]… Boy try to make the feather [signs CIRCLE[horizontal]] like indian hat. Ø try sell. The boy show up with the egg, Ø trade it.

4. **The influence of English on ASL and vice versa**
   There is little influence of ASL on Mr. Brandon's English. However, in his writing, and even more so in his speech, there is a heavy influence of ASL on his English.

5. **Comparison of narrative production in English and ASL**
   Mr. Brandon is most fluent in ASL. His grammar is impeccable. In English, he is equally prolific in writing and speech, but his speech shows a much heavier influence from ASL than his writing does. But both are influenced.

V. Summary

In summary, Mr. Branden is culturally Deaf and a fluent ASL signer with a strong mastery of ASL grammar. He used a wide range of ASL grammatical constructions in his ASL narratives, including Ground before Figure Ordering, classifiers, spatial verbs and facial grammar with ease. His comprehension is excellent. In contrast with Ms. Saunders, he has a bit more familiarity with English and lip reads and speaks to a moderate degree, quite a bit more for basic communication purposes where there is some level of expectation regarding content.

He could, having seen his partner's ASL signing, at times have been able to catch misinterpretations on the interpreter's mouth when she was interpreting into English. Like Ms. Saunders, his ASL is sophisticated and he demonstrates mastery of this language with respect to both Basic Interpersonal Communicative Skills needed for fluent social interaction and Cognitive Academic Language Skills needed for access to educational material, learning of new unfamiliar information, and interaction in academic environments. In contrast with Ms. Saunders, Mr. Branden is more flexible in switching gears between his two languages. He shows very little English intrusion in his ASL, even when going from a written English text to an interpretation of what it means in ASL. His vocabulary is strong and reliable, especially in the medical and law enforcement domains. It is considerably less strong and less reliable at the twelfth-grade level, indicating that when presented with unfamiliar medical terminology via fingerspelling or an English-based calque rather than an ASL interpretation, he would not have the ability to decompose Latinate forms to understand the words or recover the semantically appropriate word meaning from what was signed in PSE. In other words, while his ASL is sufficient to allow him to learn the meaning of medical terminology, his English is not.

Expression of these concepts in ASL terms, on the other hand, makes them accessible and therefore learnable.

Mr. Branden can express himself and understand others best through ASL. To express himself adequately and to be recognized as the bright, competent, and mature individual that he is, he must be able to speak directly to people in ASL or have an interpreter that can provide him a highly sophisticated interpretation from English and have the Cognitive Academic Proficiency in ASL and command of register and affect to do him justice in interpreting their signing.

Expert Opinion

Based upon my interviews and assessment of Ms. Saunders and Mr. Branden, the elicitation and analysis I have done on their language samples, and in conjunction with my expertise in linguistics, interpreting (particularly medical interpreting), and Deaf culture, I offer my expert opinion regarding the questions that have been posed to me.

1. **What is Ms. Saunders' level of proficiency in ASL?**

   Ms. Saunders is a natively fluent signer of ASL. Her production and comprehension of all aspects of the language are impeccable. She has both strong interpersonal communication skills needed for conversation and socialization as well as more sophisticated Cognitive Academic Language Proficiency, which is needed to process complex and unfamiliar information in an educational context. This is the kind of proficiency needed to process medical information from her doctor at a sophisticated level in ASL, to share detailed and specific information regarding her medical history and current condition, and for her to construct intelligent and sophisticated questions concerning her treatment and come across as an intelligent, knowledgeable patient.

2. **What would Ms. Saunders' understanding of fingerspelled medical terms be as opposed to receiving the information regarding the meaning of those terms in ASL?**

   While Ms. Saunders has a strong vocabulary in terms of general and medical terms she has encountered, she does not have the twelfth-grade vocabulary that

would already have many of the new medical terms and phrases she might encounter in her pre-natal visits and information sessions concerning her planned Vaginal Birth after Caesarian (VBAC): *low transverse incision, uterine rupture, dystocia, fetal distress, uterine anomalies, stripping the membranes, amniotic sac, prostaglandins, trial of labor after caesarian (TOLAC), respiratory distress syndrome, placenta previa, placenta accrete, preeclampsia, eclampsia, balloon catheter, mechanical dilation, labor induction, Pitocin, cytomegalovirus, toxoplasmosis, placenta abruption, efface, intravaginally, pelvic floor disorders, pelvic organ prolapse, cystocele, urethrocele, vaginal vault prolapse, enterocele, rectocele, urinary incontinence, anal incontinence, grand mal seizure, postictal, hyperventilating, epidural, absence seizures, petit mal seizures, hypoglycemia, inconsistent contractions, Braxton Hicks contractions, tonic clonic seizures, hypoxic, Apgar, Bloody show, endometrium, fundus, fundal height, palpation, presentation, quickening,* to name a few.

The issue here isn't whether she knows these words but rather can she visualize what they mean. She may have many of these concepts already in her repertoire of understanding, but she needs to see how they are referred to in ASL using classifiers and locative and motion verbs. This is what she was asking for and what she reports that the interpreter did not have sufficient mastery of using ASL grammar. If Ms. Saunders signed the equivalent of *placental abruption* in ASL, did the interpreter have the ability to understand the ASL and produce *placental abruption* in English. If the doctor said *endometrium*, was the interpreter able to spatially set up the uterus, expand the view of it and indicate the lining? The problem is that even if the interpreter doesn't understand the term in English and asks the doctor to clarify, the resulting clarification requires the use of specific classifiers, motion/location verbs, spatial agreement, and Size and Shape Specifiers (SASSs) to convey. If the interpreter conveys the explanation in a more Pidgin Sign English, or English-based signing what is missing is precisely the spatial grammar needed here. It is not the case that everyone that "signs ASL" as a second language has mastery of these aspects of the grammar. Getting

the explanation in non-native ASL might be equivalent to a patient getting a doctor's explanation in writing via Ms. Saunders' or Mr. Branden's written English of these concepts. Ms. Saunders, despite her vocabulary and reasonable reading skills, was unable to determine that the fifth-grade reading except on adolescence was about more than just children versus old people. She missed that it was about adolescence and she didn't even realize what she missed. When I signed the same passage to her in ASL, she understood it immediately. This is why she was asking for qualified and effective interpreters.

3. **What is Ms. Saunders' understanding of PSE or English-like sign language?**
Ms. Saunders' understanding of PSE is not non-existent, although more English-like signing is definitely out of her repertoire. In casual conversation, she can converse with people using PSE. The problem is that in casual situations there isn't a high premium on understanding. In high stakes situations where she is accessing new information, PSE will not suffice for her. Someone who signs PSE with her is also someone without the proficiency in ASL to convey Cognitive Academic Language to someone who can understand and learn from it. All Ms. Saunders can do with PSE, is use the language and schema she already knows to decode it and "translate it herself into ASL." But the quality of the translation depends upon information she already knows and can infer. Furthermore, English or English-based input interferes with her own ability to shift gears and comprehend and produce ASL. She gets stuck in a coded form of English and comprehension and production suffer.

By definition, a pidgin is a not a fully-fledged language. It is a "by the seat of your pants" form of communication between two individuals who use different languages. The pidgin utterance uttered contains bits a pieces of the target language (as much as the user can bring to the table, usually lexical items as opposed to syntax. It is received by the interlocutor who brings to the table their full knowledge of the language approximated in the pidgin and tries from

this to figure out the intended message. There is no guarantee of success. In fact, pidgin users repeat a lot, add gestures, try different things and may get the point across or may not. The danger is when the interlocutor thinks they have understood, but haven't. The example that I gave at the beginning of this report of the sequence of words JOHN UPSET MARY is a good example of the dangers here. Most hearing PSE signers would sign JOHN UPSET MARY to mean "John caused Mary to be upset." This is how the sequence would be understood in English. In addition, they would likely not be including all the facial grammar required in a fully grammatical ASL sentence. Most PSE signers and interpreters who rely upon PSE are not even considering the fact that in ASL *JOHN UPSET MARY* is an ungrammatical sentence because psychological verbs like *upset* have no ASL equivalent. In ASL, *UPSET* is an adjectival passive that only takes one noun phrase, e.g., *JOHN UPSET*, which would mean "John is upset." The sequence of three items above would have to be two utterances. *JOHN UPSET. MARY.* Meaning "John is upset and it has something to do with Mary." The meaning is opposite and the PSE utterance is very likely to be understood by an ASL signer in that way and neither the interpreter nor the consumer may realize that anything was misunderstood.

In my expert opinion, as a linguist and an interpreter, Ms. Saunders and Mr. Branden are at risk of exactly these kinds of misunderstandings when required to use an interpreter that relies on PSE. Furthermore, in addition to misunderstandings like this one, they also have to deal with communication that for them cannot convey the information that they need. Doctor-patient interaction in visits regarding a high risk pregnancy and specialized procedure like VBAC that requires the kinds of specialists that can be found at the Mayo Clinic have no room for this level of "high risk" communication to be added to their dialogues. The level of information drops to the weakest link in the chain. I am assuming that the doctors at the Mayo Clinic are either native speakers of English or very proficient second language users. In my expert opinion Ms.

Saunders is a native user of ASL and Mr. Branden is an extremely proficient user who is near-native. The weak link in the chain appears to have been the interpreter. Asking Ms. Saunders to simplify her language so that the interpreter can understand is asking her to pidginize and asking her to accept pidgin as her interpretation. Placing such limitation on her communication is not only inappropriate, it is dangerous.

4. Is the pace of Ms. Saunders; and Mr. Branden's signing of a standard speed that proficient ASL interpreters would understand?

At no time in the hours of testing that I performed was Ms. Saunders' or Mr. Branden's signing too fast for me to understand. They are fluent and very efficient signers of ASL. The only time I encountered any misunderstandings was slight and that was when dialectically unique Minnesota signs or acronyms were used. And a quick clarification put me right back on track. In my expert opinion as an ASL linguist and an interpreter, the signing rate of these individuals is not excessive.

Periodic requests for clarification, asking to have fingerspelling repeated or slowed once in a while can be expected. It can be a sign of fatigue or just a moment's lapse in attention. However, when this is happening so continually that communication is disrupted or the confidence of the consumers in the interpreter's skills is undermined, there can be a never ending spiral downward into communication breakdown.

There seems to have been one staff interpreter who was considered an appropriate match for the plaintiffs. It makes sense since she was a Coda (a child of Deaf parents, with reported native level ASL skills). There have also been other contract interpreters brought in who worked well with this couple. These native signing and nationally certified interpreters don't seem to have been thrown by the signing rate of either of these individuals.

When processing information in a second language, especially one that is not near native, incoming language can feel like it is coming in at a faster pace. Students will often feel this way. Perhaps this is one more indication that the interpreter was not a good match for these signers.

5. What are Mr. Branden's lip reading skills?

In my expert opinion, Mr. Branden's lip reading skills are very good. Overall Mr. Branden's performance on the lip reading task was 72%. He lip read highly routinized words and phrases with ease and was also able to get much of the less expected material presented as well. His guesses, even when incorrect, showed evidence of processing for phonetically related information, awareness of words that can be confused and what their alternatives are. He got every number, which is characteristic of good lip readers. He was even able to get a pretty close lip reading on words that he didn't know, for example, *nodule* in *We found a nodule*. He got *natural* and likely missed this item because the word is not in his vocabulary. While not the tops attainable, I would rate him as a very good lip reader. With some repetition and clarification, he has the ability to lip read much of the vocabulary he knows both alone and in a sentential context. He definitely did have the ability to watch Ms. Saunders signing and at times monitor the speech of the interpreter, provided he had consecutive access or was monitoring the interpreter while already predicting Ms. Saunders' answers. He can made use of lipreading in many everyday contexts, but of course one cannot lipread what one cannot read or doesn't have the vocabulary already to know. While 72% is very good, missing 28% of the information spoken in a very quiet room, careful articulation and two repetitions does not mean that he could have relied upon lipreading for his medical encounters.

6. Could complications arise during labor and delivery because of the communication problems between the interpreter and Ms. Saunders?

The answer to this is, of course. First of all, complication can arise in any case during labor and delivery, and when complications arise, time is usually of the essence-both the time to deal with the complication and the time to share with the patient the nature of what is happening.

Consider an unrelated situation: A mother hears a bang in a downstairs room and yells out, "What happened?" One child answers we were playing this game and…." There is no answer from the other child or crying is heard. The mother yells again but what did Mary get hurt? Child answers, "It's not my fault." When she arrives and asks the other child where did you hurt yourself, and the child answers, "Over there by the couch." Mother struggles to think of a way to get the information she needs. "No, tell me where it hurts."
What is happening to the mother emotionally as she realizes something has happened but cannot get a straight or at lease immediate answer as to what it is? When a complication occurs, there is no time for miscommunication.

The second concerns the efficiency with which information about what the patient should or should not do gets conveyed. Elizabeth Bates and her colleagues at the University of San Diego did a study where they discovered that hospitalized patients recovering from hip surgery or patients with depression who are tested on basic aphasia exams, can test as having aphasia.

Blackwell, A. & , E. (1995). Inducing agrammatic profiles in normals: Evidence for the selective vulnerability of morphology under cognitive resource limitation. *Journal of Cognitive Neuroscience*, 7(2), 228-257.

Dick, F., Bates, E., Wulfeck, B., Utman, J., Dronkers, N., & Gernsbacher, M. (in press). Language deficits, localization and grammar: Evidence for a distributive model of language breakdown in aphasics and normals.*Psychological Review.*

The point is that stress, pain, or emotional upset can so overload someone that their language processing can be compromised, even when they show no compromise before or after the event. As a legal interpreter, I often request a

Deaf interpreter with native language skills as my team in highly charged legal situations like court, child custody battles, abuse cases, etc. I request this even for individuals for whom I have interpreted for without a Deaf interpreter in the past. In highly charged situations language production and comprehension can be affected. The ongoing conflict between Ms. Saunders and the medical interpreter that the Mayo clinic kept insisting she use added increasing stress to each encounter, to the point where Ms. Saunders actually broke down for 10 minutes during her final prenatal visit. Furthermore, seeing this same interpreter again at the neurological evaluation injected stress into that situation as well. Language processing suffers under stress.

Childbirth is a high pain and high stress event. I have interpreted for births and can attest to the fact that these situations are highly charged and cognitively challenging, especially when complications arise. Even the communication between a husband and wife is challenging. The interpreter needs to be efficient and clear. The interpreter needs to be understood. And, the interpreter needs to be trusted. On all three counts, the Mayo Clinic had evidence that the match between this interpreter and this couple was problematic, even before going into a birth and delivery situation. Furthermore, on three counts, the interpreter in this situation had similar evidence that should have raised questions concerning her own ethical decisions regarding whether to continue in these assignments, independent of the decisions of the Mayo Clinic. Furthermore, on three counts, the interpreter in this situation had similar evidence that should have raised questions concerning her own ethical decisions regarding whether to continue in these assignments, independent of the decisions of the Mayo Clinic. These tenets are not rules. They guide the ethical decisions interpreters make.

I have reprinted the tenets *NAD-RID Code of Professional Conduct* below:

TENETS

1. Interpreters adhere to standards of confidential communication.

2. **Interpreters possess the professional skills and knowledge required for the specific interpreting situation.**
3. Interpreters conduct themselves in a manner appropriate to the specific interpreting situation.
4. **Interpreters demonstrate respect for consumers.**
5. Interpreters demonstrate respect for colleagues, interns, and students of the profession.
6. Interpreters maintain ethical business practices.
7. Interpreters engage in professional development.

The full *NAD-RID Code of Professional Conduct* can be downloaded at:
http://www.rid.org/UserFiles/File/NAD_RID_ETHICS.pdf

Two tenets (#2 and #4) in particular are of relevance here, although others can be considered. They are bolded. A relevant part of the guiding principles behind Tenet #2 is as follows: "Interpreters accept assignments using discretion with regard to skill, communication mode, setting, and consumer needs." The guiding principle behind Tenet #4 is as follows: "Interpreters are expected to honor consumer preferences in selection of interpreters and interpreting dynamics, and render the message accordingly." Examples of Illustrative Behavior under this Tenet include: "4.1 Consider consumer requests or needs regarding language preferences, and render the message accordingly (interpreted or transliterated).

As a professional certified interpreter with 35 years of experience, if a consumer expressed to me that my interpreting was inadequate for their needs, I would never discount such a statement. I would take a long hard look at my work to try to understand where the problems might lie, but I would immediately honor their request not to use me as an interpreter then (if so desired), or in the future. If I determined that the complaint was unjustified, I would still decline future assignments because the lack of trust on the part of the consumer would compromise my effectiveness.

In addition, while I hold every certification that RID and NAD offer, there are still plenty of assignments that I decline because I feel that my skills are not a match for the consumer. I consider this an important part of my professional responsibility. There are many reasons for consumer dispreferences regarding interpreters: language match, professional demeanor or behavior, personality clashes, conflict of interest, gender match, etc. Preferences (like gender match in a field dominated by females) cannot always be accommodated, but in valid situations efforts are made.

In this case, however, we have not only a history of complaints filed regarding the nature of the interpretation provided. We also have allegations of requests from the hospital for the patients to adapt their communication to the needs of the interpreter, to teach the interpreter, etc. Most striking, we have a history of conflict between this couple and this particular interpreter, which in and of itself has undermined the trust relationship, added tension and stress to their encounters, is putting strain on both the interpreter and the consumers that will affect the effectiveness of the interpreting.

To bring this kind of conflict into a birth and delivery situation, to a neurological assessment, or to the continuing encounters with one's physicians is not in the best interests of the patients or the interpreter.

7. Can NAD III certified interpreters be assumed to be qualified to interpret in medical situations, in particular neurology appointments, pre-natal appointments and high risk and birth and delivery?

It is important to note that no certification guarantees that the interpreter is qualified for any assignment. This is why the Code of Conduct guides every interpreter to use discretion in accepting assignments. I tell my students that the

biggest responsibility an interpreter has is to tell the consumers, hearing and Deaf, when interpreting is not happening or cannot happen.

However, as mentioned in the introduction, NAD itself recognizes that NAD III interpreters are qualified for some, but not all types of assignments. An NAD III interpreter might be able to interpret for a routine checking of vitals or a routine dental appointment. However, in my expert witness as a professional interpreter and an interpreter trainer, someone hiring an interpreter cannot assume an NAD III certified interpreter to be qualified to interpret more complex medical situations, neurology appointments, or for pre-natal appointments and high risk birth and delivery. The NAD exam ceased over a decade ago, so there certainly could be someone out there with NAD III certification who never had the opportunity to upgrade it but who had pursued extensive professional development and training in medical interpreting and who may well now have been able to achieve a IV or V on the test. If so, however, they should be able to take and pass the NIC. If they have not, then the credential of NAD III should still be assumed to have limitations on the situations an interpreter is qualified for.

8. **Can any interpreter be considered qualified to interpret for all Deaf individuals? And, more specifically can any NAD III certified interpreter be considered qualified to interpret for all Deaf individuals in all situations?**
I refer you to my answer above. The answer is no in both cases.

While I hold every certification that RID and NAD offer, there are still plenty of assignments that I decline because I feel that my skills are not a match for the consumer. Recognizing those situations in which we are not qualified is one of the benefits of hiring highly credentialed and highly experienced interpreters. I would venture to say that very experienced interpreters turn down more assignments because they deem themselves unqualified than less

experience interpreters do. We have "conscious incompetence" as opposed to "unconscious incompetence."

9. **What is standard practice in Minnesota regarding interpreters hired to work in hospital settings?**

We can all take as a guide the practice of other major hospitals in the Twin Cities and some Greater Minnesota catchment area. While there is no Minnesota law regulating what level of certification is required, standard practice among most hospital systems in Minnesota is to hire only interpreters with CI and CT or NAD IV or V or the NIC. This is the level of credentialing that increases the likelihood that an interpreter would be qualified. More than twenty six healthcare systems in Minnesota do not accept NAD III as an acceptable certification for their Deaf patients.

10. **The interpreters in question took and failed the NIC test in 2012. Is this demonstrative that the interpreters were not minimally competent to serve as high-level medical interpreters?**

Failing the NIC is <u>not</u> evidence that the interpreters are <u>not</u> minimally competent to serve as high-level medical interpreters or, following the interpretation of the NIC, not competent to be interpreters at all. Not taking and/or not passing the NIC constitutes the <u>lack of evidence</u> that they are qualified. They have not been vetted and therefore we cannot assume that they are qualified. To hire someone to work in high-level medical situations whose skills have not been vetted is irresponsible and opens them up to exposure should something negative happen.

Conclusion

I mentioned earlier that the interpreter in birth and delivery needs to be efficient and clear; the interpreter needs to be understood; **and** the interpreter needs to be trusted. The hospital had plenty of evidence that these three conditions did not hold. Furthermore, regarding these three factors, the interpreter in this situation had similar evidence that should have raised questions concerning her own ethical decisions regarding whether to continue in these assignments, independent of the decisions of the Mayo Clinic.

In this case, however, we have not only a history of complaints filed regarding the nature of the interpretation provided. We also have allegations of requests from the hospital for the patients to adapt their communication to the needs of the interpreter, to teach the interpreter, etc. Most striking, we have a history of conflict between this couple and this particular interpreter, which in and of itself has undermined the trust relationship, added tension and stress to their encounters, is putting strain on both the interpreter and the consumers that will affect the effectiveness of the interpreting.

To bring this kind of conflict into a birth and delivery situation, to a neurological assessment, or to the continuing encounters with one's physicians is not in the best interests of the patients or the interpreter.

The field of sign language interpreting is unique in having many practitioners who are natively fluent in only one of the languages they interpret between. In high stakes spoken language interpreting, when native fluency cannot be assured on both sides of the interpreted exchange, a second interpreter is brought in and as a team the two interpreters provide native-level services. It is generally accepted in formal spoken language interpreting that an interpreter only interprets into their A (native) language, not their (B) second language:

Seleskovitch, D. 1968 L'interprète dans les conférences internationales, problèmes de langage et de communication, Paris, Minard Lettres Modernes, 262 p., 2ème édition 1983. Translated into English as Interpreting for International Conferences. 2nd revised edition, Washington D.C, Pen ad Booth, 1994.

Those of us who are hearing, expect native-level interpretation into English. And most of the time, we get it, even in medical encounters with ASL/English interpreters, since most of these interpreters are native speakers of English. Even if there were issues with comprehending, the ASL what comes out at least sounds good to us. However, Deaf patients have for decades been forced to try to cope with interpretation that is not native-level in either fluency or grammaticality. **Ms. Saunders and Mr. Branden are just asking for what most other patients who are provided interpreting services get, native level language interpretation.**

These patients came to the Mayo Clinic because of the technical skills and the technology available there. VBAC was an option that they wanted to take advantage of, but they wanted to do so fully informed of the procedure, their part in the procedure and well-aware of the risks, especially since Ms. Saunders has a history of seizures. They needed to ask complex questions and to understand detailed answers in a way that made sense to them and through a language that uses visual representation in a way that English cannot. They made every effort to make known their needs. They offered precise information about the level of ASL skill and certification that would best meet their needs. The persisted in their attempts to stay at the Mayo Clinic and have the procedure they wanted to have in the birth of their second child. But, being a highly intelligent and conscientious couple who wanted to have full information and full participation in their medical care, they were forced to give up their plans—forced by fear that the were not understanding what they needed to and fear that they would be going into a complex procedure in a high risk pregnancy with an interpreter they could not understand. Where most hospitals try to honor the request of an expectant couple with a designated interpreter who they trust, understand and feel comfortable with to work with them through this very intimate but also stressful experience, in this case the hospital refused to consider their reasonable and justified preference for any certified interpreter with CI and CT, NAD IV or V, or NIC and the skills to interpret fully in ASL. Instead, they were forced repeatedly into a stressful situation working with an

interpreter with whom they had serious challenges understanding, a conflict-ridden relationship and a lack of trust.

In my expert opinion, the interpreting required for Ms. Saunders' prenatal visits and for her neurology appointments requires native level ASL skills to effectively and accurately convey the medical information that had to be transmitted. Fingerspelling terms or calquing them in a more English form of signing would be like interpreting from Russian to English and leaving any technical terms in Russian. Or, if given an explanation in Russian, coding using some English words and other Russian words, but leaving the grammar in Russian. This did not offer this Deaf patient and her partner the same access to information and the same ability to participate fully in their medical care that is afforded to hearing patients. These are highly fluent and intelligent patients who need highly fluent ASL interpretation. They would be best served by a Coda (hearing native signer) or a Deaf/Hearing team, who could offer fully native skills in both English and ASL, both of which are readily available in the Twin Cities area. However, they were asking for *any* certified interpreter with solid ASL skills who was credentialed to interpret in most situations, including medical. Their request could have been easily accommodated and should have been.

Judy Anne Shepard-Kegl, Ph.D., Certified Interpreter